

THE TIMES Educational Supplement

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A panoramic view of what's wrong

The week's contribution to the educational discussion has added some sour notes to the chorus in the media... Michael Church reviews The Best Days?



Have speech will travel

The crowded programme of the Great Debate is making heavy demands on the resources of education's stage army as the show tours the country.

Break

Some of the big players have entered into the spirit of the thing as well and put on a motley. Last Friday at Peterborough two speakers from the floor, Mr M. Thompson and Mr G. M. Watson, were listed as TUC men, though both are local junior school heads, a fact that only Mr Watson broke cover and revealed. NUT full-time official Bev Curtis was also down as a man from the TUC.

Even the producers were a bit bemused by these players, since the JES had accepted the names on the TUC's local list without questioning who would be playing the parts. It was, of course, one way of getting more speaking roles for local teachers.

The TUC have their own variation on the general theme. They switched the names of performers but kept the same script. The speech by Jack MacGougan (of the tailors and garment workers) on school and work at Peterborough contained whole pages word for word the same as Roy Jackson had delivered at Newcastle.

Mr MacGougan agreed later that there was a basic TUC speech and everyone drew on the same material. "Well," said master of ceremonies Margaret Jackson philosophically, "TUC policy is TUC policy."

Watch it and see

Even before Panorama's film on an outer London comprehensive is shown (see BBC on Monday) the hissing and clapping has begun. The great panjandrum at the BBC have put up the shutters and forbidden the programme's producer, Angela Pope, who is a freelance, to speak to anyone. It seems they were not happy with Michael Davis's lengthy piece on the subject in The Observer two weeks ago.

Though no one has given out the school's name, the grapevine among some 1,000 parents is active, and word has reached me that it is Faraday at the Acton (poor and black) end of Ealing.

There the head, Mr E. J. Jones, who agreed to let the filming go on in the school during last term, has been busily mending his fences all week. Some of the staff were always against it, a few refused to be filmed, and general nervousness and mistrust of the media has not diminished since a date for screening the film was announced.

Not having seen the film, one can do no other than fall in with the exhortations of Ealing's chief education officer, Mr R. J. Hartley, to write and not to believe that "it will arouse a lot of interesting comment that is very relevant to the present debate. If it makes people go into what is underlying some of the problems that the school is seen to be facing, it will be valuable." What are the prob-

lems and what does underlie them? "I'd like to wait and see what people do regard as the problems." Whether or not the said "problems" are typical is already forming the centre of the debate inside the school and doubtless will do so outside. It is a working-class school — I should think my two children are among the few middle-class children here," Mr Jones said. — Well, estimates vary and no one is officially allowed to count — but between a third and a half.

Not surprisingly it was what Mr Jones describes as "a very thin academic top". For all that it has a sixth form of 170 (not mentioned in the film, I gather) and sent six children to university last year.

The school has a falling roll — probably mainly due to the Acton area moving out of Acton — and is well down the list in terms of parental choice. However, Mr Hartley insists that it is not exactly average for the country, it is not in any sense an extreme school, that it achieves a high level of academic success and has a friendly atmosphere and a highly developed pastoral system.

When the head and the local authority people saw the programme, which concentrates on showing the daily life of a class of about a hundred third-year children, they did ask for more emphasis to be placed on the academic, examination course work. Changes were made accordingly.

So, on with the debate. What does the film show? Is it raising questions which the Great Debate is shirking? If you were Prime Minister would you like your grandchildren to go to such a school? Do write and tell us.

There was a time when Max Morris, former NUT president and head of Willesden High School, was led to believe his school was going to be featured on the programme. Miss Pope visited the school twice and it was just a matter of fixing the date for the cameras to arrive.

"Then I heard nothing more," Mr Morris said. "I reckon she didn't find the representative problems she was looking for in an ordinary London comprehensive." But if Miss Pope could speak she would probably say that Max's 1,700-pupil school had more immigrants (getting on for 70 per cent) than she was looking for.

In jeopardy

Sir Robert Meyer, gallant nonagenarian and champion of music for young people, was very angry on Tuesday. "A miracle was started 50 years ago," he said, "and it is inconceivable that anyone should interfere with it."

The miracle was the Junior department of the Royal College of Music, which gives tuition in two instruments, in general musicianship, and in musical history on Saturday mornings for children age 10 to 13 who have the potential for a career in music. It is, Mr Boyson was, however, much

being badly interfered with. This started last April, when the college was debarrated from using any of its BES grant for the Junior department — and this at a time when L.A.s are being forced to make drastic cuts in their Junior Music Awards Scheme. This all means that unless money can be raised for a capital fund, many children will have their musical education suddenly cut off in mid-course, from July onwards.

The training of a musician is a continuous process. As David Willcocks, director of the college, says, it is not the sort of thing that can be left for a couple of years or so until things get better.

Last year, 75 per cent of the leavers went on to further education or professional employment. A few years ago, some of those leavers were Julian Bream, Philip Jones and John Lill, and Andrew Lloyd Webber. It makes you realize what is being jumbled with.

Media bash-in

People concerned with education have given the opportunity this week to get their own back on journalists. The Polytechnic of Central London laid on two education correspondents for people to bash at in a public forum. "Telling the truth about education" was the title of the evening.

John Izbecki, education correspondent of the Daily Telegraph (the paper educationists love to hate), tried to drag them back to the point, and attempted a spiced defence, without too much success. We write about nasty things like William Tyndale, the LSE and Essex University because to do otherwise would bore the pants off readers, he explained.

"We do tend to sensationalize and we do make some matters worse," he conceded. But, in his view, certain things had to be publicised in the public interest (whose public interest? he was asked several times). Disruption by students should be reported because people were paying for them to be educated. When a vice-chancellor's windows are smashed by students, then this is something that is to be reported.

Next week

Patrick Carnegy writes about romantic opera; Noel Hughes discusses the Not Book Agreement. Books: Tony Cline reviews two new books about language and social class; David Whitehead evaluates new economics textbooks; history. TES Extra: geography.



Ethnic arts in Britain are on the move. This week has seen the launching of "Echo", a monthly newspaper published by M.A.A.S. the Minority Arts Advisory Service. It is a professionalising job, fitted by crusading staff, and should do much to stimulate further cultural development. Our picture shows Radha Reddy, the Kuchipudi dancer, in action last autumn at the Commonwealth Institute. "Echo" can be obtained from M.A.A.S. Basement, 1 Hurlford Street, London N.1.

Aristides

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MARK JACKSON reveals a new plan to beat unemployment among school leavers



£17 a week to keep jobless teenagers off the streets?

A draft plan to provide all school leavers up to the age of 18 with some kind of paid work or learning has now been worked out in the Government's Manpower Services Commission. The cost is thought to be £200 million a year. If approved the scheme could start this summer. What is planned is an integrated programme of activities for around 500,000 youngsters a year who are unable to get jobs on the open market. It differs from the current trials measures in that all the options it offers heavily emphasize planned training or education. The scheme gives a major role to local education authorities, statutory and voluntary youth services, employers' organizations and trade unions. It is intended that programmes throughout the country should be organized and administered by local committees representing these groups, possibly together with young people from the age group concerned. The committees will be able to pay a flat rate allowance of around £17 a week to all jobless youngsters participating in their programmes, which will be varied to meet area and seasonal needs. They will also employ staff to run the schemes. The plan will be set out in detail in the HOLLAND report, drawn up by an MSC working party representing industry, the education service and voluntary organizations, and headed by a senior civil servant, executive, Mr Geoffrey Holland. It will be finalized next week and put before the April 26. They will then decide whether to make the plan public as a formal recommendation for action by the Government.



Same wavelength? The Annan report calls for big changes in television and radio but leaves education broadcasting largely as it is. Auriol Stevens reports, page 5. Also this week, "The man from Auntie" — an interview with John Robinson of BBC educational broadcasting, page 10.

'Top teachers must teach'

Conrad Rainbow said at the Birmingham Great Debate that senior staff should teach and not waste time on administrative work. Top teachers disagree. TES survey, page 4.

Black outlook

Harry Judge acknowledges the problems but looks in vain for constructive suggestions in the Black Paper published this week. Review page 2, report page 6.

Corporate man

In the second of two articles, Patricia Rowan looks at the effect of corporate management on the local education service pages 18, 19.

Exam successses

Children in Leicestershire comprehensives perform better in examinations than those in selective schools — but social class proves a critical factor page 20.

Romantic opera

Patrick Carnegy reviews four books on the subject page 22.

Extra Geography pages 40-56

Leaders 2, personal column, John Rae, 4; foreign news, 14, 15; letters, 16, 17; sport, 13; features, 18-20; Talkback, RBIA project, college democracy, Network, 21; books: language, class and children by Tony Cline, abortion, violence, literature, children's literature, history, economics, 23-27; resources and equipment review, 28-33; arts reviews: theatre and education, television, art, 94, 95; mathematics, teachers, chess, Break, 96.

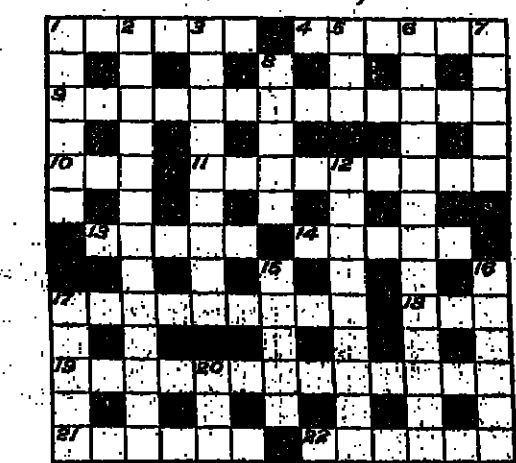
Classified ad index

Why government training money is being withheld from training courses for jobless handicapped young people page 9.



Staff wishing to smoke may only do so behind the cycle shed.

Crossword No 1,077



- Across 1 Vehicle for the dry (6). 2 Old car for old (6). 3 Capital expanding (6). 4 Suggests an S island (3). 5 Doctress painful in a scab (9). 6 For the cut and thrust of Spanish conversation (5). 7 Full on; a flower is born to — uncut (5). 17 Will serve either white or black (6). 18 Topless Eastern Monarch (3). 19 Sure to stir up, 1 (6). 21 A most agreeable fellow (5). 22 Doveset bank (6).

Chess

Move for move — or the game will last. Never have the openings been so closely studied and so well defined as they are now. When I was a young player there existed only one book that dealt with the openings in a reasonably exhaustive manner — Modern Chess Openings.

At one time this knowledge of the openings was equalled and in a way surpassed by an ignorance of the endings. But I am happy to say, within the last 20 years there has been a revolution in this field too. Why then should any game between reputable players ever end in a draw? The answer is that, between the opening and the ending, the gods have placed the middle-game. So far, valiant attempts to chart this field have failed and players still have to show

Chess

ent, this Bishop will exert quite a bit of pressure in the near future. (d) Threatening 12, R-P2, 13.BxP, KixP; followed by 14.Qx2. So White at once retreats the threatened Bishop. (e) Now, after five moves, the QB reveals its power. (f) And not 1.RxK, BxP; 17.PxN, when White's King-side would be broken up without the compensating advantage of two Bishops. (g) Conceding Black a valuable tempo since he himself is going to make the exchange in any case, correct was an immediate 18.QB3. (h) After the 18.KxK5 on account of 20.F-QR4, or K-K1. But if, for example, 20.K-K1, KixRP; 21.KxQ-KR3 looks most uncomfortable for White. (i) White seems to be played move by move chess without an coherent plan. Instead he should increase the pressure on the K5 file by 21.R-KK1. (j) Wrongly weakening his K4 square; 22.K-K1 should have been played. (k) Overlooking Black's powerful rook after which White's position collapses like the proverbial house of cards. He should have settled for 24.Px2, Kx2; 25.Qx2 when indeed White has no worse game but he is not yet lost. (l) There is no means of averting Black's Q-R5 ch.

Chess

White: S. H. Lin; Black: J. Tisdell. Q. P. Nimzo-Indian Defence.

Harry Golombek





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### Exams—but when?

There were two major surprises at the Great Debate meeting in Birmingham. One was the extent to which a common core curriculum was welcomed in this, the one local authority which has negotiated its introduction. The other was the serious interest in and support for suggestions that external examining at 16-plus might be abandoned (page 8).

Mr Pat Martin started the ball rolling with the suggestion that only the agreed core subjects—mathematics, English, science and languages—should be publicly examined. Mr Conrad Rainbow added his voice, suggesting that a general examination at 18, broadly on the lines of the European and international baccalaureats, would allow the phasing out of the 16-plus, at least for those who were staying on. The argument was taken much further by Dame Margaret Miles, who wanted to see external 16-plus examinations phased out altogether, releasing substantial sums of money for in-service training and support in the induction year.

There was no dissent. There were indeed a number of bows in the direction of one or other position in the course of the debate. Most significant obedience of all came from Mrs Williams who said afterwards that she hoped the high-powered committee on the 16 plus proposals would be discussing such broad questions as well as the details of the proposals. Abandoning 16 plus examinations would save large sums of money. But there would be obvious difficulties until 18 plus examinations have been altered to a format which requires a broader field of study: otherwise the whole weight of a level specialisation could be felt lower down the school.

It seems that, at the eleventh hour, the fundamental questions about exam reform at 16 plus and 18 plus are going to be asked after all. The delays and temporiz-

### Annan: little change

The Annan committee has concluded that educational broadcasting should remain part and parcel of the output of all broadcasting channels. The more structured pedagogical programmes may be concentrated on the new fourth channel and BBC radio channel but the programmes of wider educational interest should continue to appear on the more popular channels.

In so recommending, it has accepted the philosophy of doing good by stealth which lies behind resistance to a broadcasting ghetto for education. The size and nature of savedroping audiences are unknown but assumed to be large and important and for such operations as the adult literacy campaign essential.

The committee received a large volume of evidence calling for an expansion of educational broadcasting particularly in the adult field.

### Better class babies

Everybody knows by now that the downturn in the birthrate which began in the mid-1960s is going to take away teachers' livelihoods in the 1980s. Information on this topic, therefore, is at a premium. For what it is worth, the Office of Population, Censuses and Surveys has now issued an analysis of recent birthrate figures broken down by social class. This shows that between 1970 and 1975 the figures for social classes 1 and 2 showed little change at around 140,000 to 150,000 legitimate births a year, while the number of children born

to "manual" families dropped from about 470,000 a year to little more than 330,000. So what? So a higher proportion of "middle class" children will be well in tests and obligingly suit themselves to the accounting, production and examination boards and for the independent schools, whose clientele have the decency to continue to reproduce themselves (or else, continue to have children they will not be able to afford to send to fee-paying schools)? So—a quirk of the statistics relating to the age-structure of social classes 1 and 2?

## Harry Judge reviews the Black Paper Over-kill or over-shout?

It ought to be possible, after reading yet another Black Paper and in this year of the Great Debate, to salute the victors in a noble cause. After all, of 56 the untiring editors are proud to remind us, when they opened their campaign in the spring of 1969 they were lonely and despised. That sunny world belonged to the progressives soaked in Plowden, committed to comprehensive reorganization, believing in the universal power of love.

Everybody apparently believed in inquiry methods, Nuffield science, new maths, the expansion of higher education, free milk, mixed ability teaching—in all the triumphant college of education orthodoxies of the 1960s. The editors' first braying blast of the trumpet, Boyson and Cox against the monstrous regiment of softies. At first, the response was contemptuous: from the Secretary of State, if not from the Daily Telegraph.

But things are different now. The (first) Bullock report—for all its reassuring commentary—reinforced anxieties about basic skills. The DES began to stir, HMI to shake the foundations of the bureaucratic educational pyramid at its broad base.

Stuart Sexton, infinitely more romantic than the progressives whom as a good Conservative candidate he attacks, wants "a framework within which variety and diversity can abound in accordance with the aspirations and abilities of the children". (How about that, incidentally, as a truly child-centred educational system?) And what about all the countervailing talk about the evils of letting children choose?

There are to be no limits on the criteria for self-differentiation among schools: music, dancing, singing, mathematics, sport, Christianity, languages, discipline, woodwork, sex. If all the shouting around will not work "the local education authority should re-establish selective (by ability) academic schools for 20 to 40 per cent of the children". That proposal has at least the virtue of being intelligible.

So, unfortunately, has what R. T. Allen has to say about teacher training. Here, again, the mood of recent years has hardly been one of smug self-satisfaction. Certainly, the intensive expansion of the profession: not least, the development of over-theoretical courses and the pompous inflation of the field towards which the James Committee was not over kind.

For a variety of reasons, things are now changing with dangerous rapidity in a direction with which the Black Paper lobby should approve. But if Mr Allen is headed that development will either prove unworkable or—so great would be the victors and press on together (for they are quite nice to some of us) will be about as reversed. For he would simply do away with the whole shoddy business, and place teacher training entirely within the schools, on a simple (but happily unexplained) apprenticeship system.

Mr Allen is also against the writing of essays by student teachers (although I would expect that his own piece could attract some devoted criticism from, say, Jacques Barzun who also contributes a characteristically peppery piece to this collection). Mr Allen taught English for four years in a grammar school and is now, of all things, a lecturer in the philosophy of Education. He senses the inconsistency in his position.

These two examples—one on the diversity of schools within a free system, one on teacher training—might suffice to illustrate the first weakness of the Papers: their despicable thinness in terms of practical remedies for real ills. But the second reason for not sending up three cheers for this Paper is, to my mind, very much more serious.

There is surely now no doubt even if there ever was—about the gravity of the problem with which the English educational system is faced, the shortage of resources, the sagging of confidence, a deeply worrying decline in academic standards. The recent and important HMI paper on modern languages, science and maths is a sufficient index of the problem.

It is, therefore, all the more lamentable now to avoid polarizing things in this Black Paper is written in a spirit of bitter and exaggerated polemic, and upon what emerges as



The morning after: pupils arriving at Faraday on Tuesday.

## BBC film 'contrived' say Faraday staff

Wednesday morning, the staff of Faraday School, Ealing, the school projected as an "ordinary comprehensive" in Monday's BBC television Panorama documentary, *The Best Days?*—seemed relaxed and almost enjoying the battle.

"One bonus", said one of them: "We've now got a Dunkirk spirit inside the school." "That's right," said another: "Our trip is smeared all over the ceiling but, by God, it was a victory."

In a sense Faraday is ordinary—mixed, 1,100-plus, formed in 1966 out of two secondary moderns to make one of three "comprehensive" in an otherwise selective system. When Ealing began planning out its grammar schools two years ago, Faraday was not the choice of the few middle class parents in the district. They chose surviving Inner London grammar schools near by, or the Ealing grammar comprehensives.

In recent years, as the school built up its academic side (137 entrants got 320 grades A to C at GCE O level last year, and six pupils went to university from a sixth form of 170). Ealing has used it as a suitable show school for foreign visitors, especially those interested in multi-racial education.

Everyone in the school thinks the film was slanted, from the secretary ("I was disgusted") to the toughest looking boys in form 3-4, the middle ability 13- to 14-year-olds much featured in the film ("Some lessons are like that, but a lot aren't").

The staff's main complaint was that the film gave prominence to two probationary teachers in their first term (the American, and the history teacher). It did not show form 3-4 under control—though the producer filmed them in disciplined classes. Nor did it show more motivated sitting to attention with their noses six inches from their work, and have been learning just as little: the challenge is to find the right balance," said a young teacher.

"They're great kids—but a handful," said another. At the start of the first period, they were working through equations— $4x+2=3x+1$ —with perfect discipline. One or two slunk in late, and settled down fast. The staff began to feel nervous half way through the filming. They called a meeting with the producer, Miss Angela Pope. They felt she gave them assurances that they should see the film in advance: the BBC deny this.

The head, Mr E. H. Jones, who resigned before he saw the film to take a new headship, says: "I should have done better in two paragraphs. I should have protected my probationers more stringently. And I should have insisted on seeing the film in a calm atmosphere—not in my lunch break, in the cutting room, with everyone working all round. I did not get a proper perspective."

He feels the only other institutions the BBC would have dared to treat in such a fashion are prisons and mental hospitals. "It is part of a national syndrome in society. People do not want to take responsibility for kids of that age—just as they don't for the aged, or criminal, or with it, and if we don't like what you're doing, we'll clobber you." We keep saying: "Come and join us, and help." But they don't want that."

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Mr Edward Jones, headmaster.

## Mercury levels above danger limits

Levels of poisonous mercury higher than the danger limits set for industry have been found in some London schools, it was confirmed this week. The Inner London Education Authority has decided to tighten up on safety measures.

## Unions settle for minimum rise of £132

by Stephen Cohen

Agreement on pay rises for teachers was reached last week by the Burnham Committee which negotiates salaries. The minimum rise for teachers earning less than £3,000 a year is £132. Those earning between £3,000 and £4,160 will get 5 per cent more, minus £21. Those earning above £4,160 will get a rise of £189.

The total cost of the rises is £80m. The teachers had claimed an extra £10,600,000, equivalent to about another £20 a year each, but the management insisted that the total cost of the rises should be £10,600,000, less about 75,000 more on various annual increments which will be paid later this year.

Increments have been the sticking point since the start of this year. The local authorities contended that they were not "self-financing" as was generally assumed. It used to be the case that those teachers who reached the top of the pay scales and stopped receiving increments were cancelled out by younger teachers who started getting them.

But the age profile of the teaching profession has changed in recent years and the self-financing of the increment system has been thrown out of gear. The authorities maintained at the start of the pay talks that increments cost more than £132. The teachers disputed this and also argued that there was no convincing proof that increments cost anything.

The social contract stipulated that increments could not be paid in addition to the salary rises allowable under the pay code so the teachers will not obtain the maximum of £208 a year more. No one, however, will get less than the minimum of £2.50 a week laid down in the code.

The row over increments has cost each teacher about £21. Mr Fred Jarvis, general secretary of the National Union of Teachers, said the settlement was the best that would be reached. He said the union would seek to change the pay policy to get rid of the incremental problem.

The National Association of Schoolmasters' Union of Women Teachers said in a statement to all its members that career teachers had been robbed. The union wanted staff at the top of the pay scales to get the full £4 a week allowed under the pay code instead of its being reduced by £21 a year.

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## Population perk for public schools

Independent schools, increasingly hard pressed to keep up pupil numbers, have received some good news this week. New Government figures show that they will probably not be seriously affected by the falling birth rate which is beginning to close schools throughout the maintained system.

The figures, from the Office of Population Censuses and Surveys, show that the number of children born to parents in managerial and professional jobs, those most likely to go to independent schools, has been falling. Between 1970 and 1975 the annual number of births to these parents was steady at about 150,000. *Population Trends 7*, HMSO. £2.

## No jobs for 300,000

Peak seasonal unemployment among 16 to 18-year-olds is unlikely to fall below 300,000 during the next five years, the Holland report (unpublished) shows. It may even stay at this year's level of 350,000.

Manpower Services Commission analysts have prepared a detailed set of forecasts for the working party. The 300,000 level is the minimum to which they consider the annual peak can fall on any reasonable assumptions of improvement in the economy.

The figure assumes that this year has been the low point of a traditional business cycle, and that there will be no significant deterioration in the relationship between unemployment and the general shortage of jobs.

Further ahead, the analysts expect the situation to improve when the birthrate bulge begins to work its way through the post-school age group.

But some outside researchers and others who have been assisting the working party fear that long-term changes in the industrial structure will more than offset this demographic relief. Youth unemployment, they think, will remain just as high as now. It may even get worse.

The March unemployment figures released this week show a further big drop in the number of school leavers still registered as jobless: there are now 23,641—8,191 fewer than in February.

But the figures cover only those who have worked the total number of 16 to 18-year-olds out of work has been running at about three or four times this level, but it is thought to have fallen by about a third since January. There are about 75,000 more on various Government-funded work projects and training courses.

## £17 a week for teenagers

A considerable number of staff will be needed to run the projects and to provide various kinds of instruction. It is likely that many of them will be unemployed teachers.

The working party, applying National Foundation of Educational Research criteria, estimates that around 20,000 school leavers a year need help with basic literacy and numeracy.

It is intended that the various options should be linked so that a youngster can, during the years he is entitled to help, be able to go through a planned progression of training, education and experience. But the Holland report will warn that care is needed to ensure that the scheme after they have become ready and able to get jobs.

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# Cardiff: Round 6 of The Great Debate Rumpus over failure to speak Welsh

by Tim Devlin, of "The Times"

Professor George Thomas, of University College, Cardiff, absent-mindedly threw a spanner in the works of Government when Black Paper theories about exam Black Rates when he spoke during the great debate in the city on Tuesday.

He said that the pool of professional examiners, willing and suitably qualified, to examine in GCE had now dwindled to such an extent that it was meaningless to compare today's increasing exam pass records with those of a decade ago.

Professor Thomas, who is head of the English department and has recently given up examining after 25 years, told the conference: "We have a large number of passes but if you have been examining you know how they have been achieved."

Previous rounds in the great debate series have become bogged down over resources. This one reached a nadir when speaker after speaker from the floor of Llandaff College of Education complained that they could not speak in Welsh because there were no simultaneous translation facilities.

Mr Han Wyn Williams, of Undeb Cenedlaethol Athrawon Cymru (the Welsh Teachers Union), ignored the sign "Dim Ysnygu" and went on smoking as he spoke of the demand for four Welsh medium schools in Mid-Glamorgan. Speakers said the Principality had the highest literacy rate in Britain, the lowest examination pass record, and the service most starved of resources trying to help the most disadvantaged children.

The silence of the N.U.T. contingent during the day was unprecedented. Mr Gwyn Jones, chairman of the N.U.T.'s Welsh committee, explained: "Neither by training nor qualifications are we qualified for circus stunts."

Mr John Bruce, director of education for Mid-Glamorgan, pleaded

# Top teachers say they don't waste time

A suggestion that top teachers should stop wasting time on administrative work and do more teaching got a poor reception this week from top teachers themselves.

The suggestion came from Mr Conrad Rainbow, chief education officer for Lancashire, at the Birmingham Great Debate meeting (page 8). The TES made a spot check on assorted schools to find out how much time senior staff do spend teaching. The results (right) vary, but heads are unanimous in disagreeing with Mr Rainbow.

They did not see how more time could possibly be spared for teaching by their hard-pressed deputies and heads of departments. Several, including two in Mr Rainbow's own ballwick, were even planning to reduce their teaching load next year. A third Lancashire school, however, used its resources to reduce class size and expected department heads to do their administrative work at home.

Several heads pointed out that it was unfair to pupils and staff if they took on much teaching themselves, since they were always being called away to other duties. They agreed with Mr Charles Stuart, head of Abbey Wood School, London, that of any school, the nicest place to be is in a classroom where no one can get at you. But it means you're not there to react quickly when the occasion demands. "That was not what they were paid for. You don't get £5,000 a year to stand in the way of 30 pupils," said Mr Michael Murland, head of Woodberry Down, London. But he takes 11 periods himself.

Most big comprehensives have two or three deputy heads. Time-sharing problems, combined with additional job options, can occupy time for most of the year. Pastoral work and discipline can be as important as administration

# How many periods do they teach? A TES survey

School and size	Total possible	Head	Deputy Head	Heads of Houses	Department Head
London Comp. 1,310	38	Cover only	11-15	20	22-27
London Comp. 1,380	35	Cover only	4-5	17	26
London Comp. 1,110	35	8+ cover	2-10	26	27
London Comp. 1,300	35	11	11	24-26	24-26
Devonshire Sec. Mod. 670	40	6	23	32-33	
Devonshire Comp. 1,600	40	5	20	35	32
Sheffield Comp. 2,150	40	3	6	31	26
Lancashire R.C. Comp. 1,210	40	0	20	26-32	
Lancashire Comp. 1,010	35	0	17	30	26
Lancashire Comp. 1,310	35	6	12-14	28	26
Berkshire Comp. 40	2	15	32-33	3	
Berkshire Comp. (Girls) 1,100	40	6	10-24	31	
Newcastle Comp. 1,800	40	6	12-15	25	32-35
Newcastle Comp. 1,400	40	6	15	32	28
Leicestershire Upper 1,350	40	16	11-14	32	28
Leicestershire 11-16 35	Cover	12-13	14	28-30	
Leicestershire 11-16 1,160	35	4	19-27	26-29	
	40	Cover	12-14	28	32

Where no figure is shown, the school has no such post

for the others, especially in big inner city comprehensives.

"You have to liaise with parents, industry, social agencies and do all the odd jobs of the welfare state," said Mr Arnold Jennings, head of Ecclefield School, Sheffield, and this year's president of the IMA. "In a city school of 1,500 to 2,000 it takes four people to do the work a head would do in a smaller school."

Filling in forms took many hours. "It is totally unhelpful, distorting and superficial to talk of minor clerical duties." As several other staff, they could take of clerical work, though you expect them to under Form 7.

Nearly everywhere, heads three with the heavy loads the heads of houses carry—who got most time off. "Anyway," said Mr Stuart, "this sentimental nonsense people who can teach, teaching suggests that can. The others have got to

# Annan report on future of broadcasting Schools not to be channelled off

Education should not have exclusive use of any time television or radio channel, nor should all educational broadcasting be confined to a broadcasting ghetto. This is the conclusion of the Annan report, published this week.

Principal recommendations are for a new fourth television channel, new VIII radio channel and an area television channel to be provided by re-engineering existing VHF channels. Education, the report says, should have a significant place in these.

The 60,000 word report of the Annan Committee on the Future of Broadcasting has been fought over for three years. The education chapters are almost the only non-controversial part.

The committee was broadly satisfied with the standard and organization of educational broadcasting. It refrained from passing judgment on whether or not it should be expanded and confined itself to a dispassionate analysis of the present constraints and the future possibilities.

The principal constraints, at least for the time being, are money and air time. The committee found that "the cost to local authorities of receiving school broadcasts is quite substantial and is likely to remain so." Local authorities were unlikely to give broadcasting the highest priority in allocating scarce resources.

Direct transmission, the committee believes, will remain the most economical way of reaching an audience until the cost of making, marketing and playing back video recordings is reduced. "There is as yet no sign of the reduction in price

# Blue-blooded challenge to red-tinted students

but was defeated by extreme left elements—to a policy of merely not inviting such speakers to university meetings.

Who these are, though, is not always clear. And Mr Peter Ashby, deputy president, remarked this week: "While the 'no platform' policy has become something of a sacred cow, the real problem is not the out and out National Front but those who say: 'I'm not a racist but...'"

The executive, broadly left and still expected to be after this week-end's elections, could easily be defeated again on this issue.

They do not expect to be, though, on the problem of tuition fee increases. They will be opposing a proposal for a fee strike similar to the real strikes of two years ago. For a start, it could only be implemented by self-financing students, a small proportion of the whole and including many postgraduates who are probably ready to pay their fees once they have found them.

"We prefer to look for long term methods of fending together with senates, councils and governing bodies rather than create short-term cash flow crises," said Mr Ashby.

Mr Clarke, whose £2,000 a year presidency finishes officially on June 30, admitted he was starting to look at the situation with more interest. Yes, he had noticed the Association of University Teachers were looking for a deputy general secretary. . . .

# The main recommendations


- A new Open Broadcasting Authority to run the new fourth channel drawing its programmes from both BBC, ITV and a range of independent producers including education interests. The new authority would be financed by advertising, grants and direct sponsorship.
- A new local broadcasting authority to unbundle the "mess" now existing in local radio.
- A new Telecommunications Advisory Committee to review technical developments. Advances in cheap video recording equipment could mean widespread distribution of educational programmes.
- No single education channel. Educational programmes should continue to be broadcast on all national and local outlets. Education should have a significant place on the fourth television channel and on the additional radio channels.
- The Open University programmes would largely be transferred to these channels.
- BBC and ITV to continue to make specific educational programmes, but to be financed by the educational authorities.
- The broadcaster's track record in producing educational programmes is too consistently successful to contemplate their release from their obligation to make educational programmes.
- BBC and ITV should not in future be the sole providers of educational programmes. Independent production groups, resource centres and other educational systems could also provide programmes.
- Better coordination between educational broadcasting departments of the BBC and ITV and those of the education authorities.
- Routine educational broadcasting to continue to be financed by the education authorities to ensure independence. Outside finance to be used for support services on the lines of the adult literacy campaign.
- Objective audience research to establish the effectiveness of educational broadcasting, to be undertaken by broadcasters.
- National education organizations should be represented on the IBA's educational advisory bodies. "At least one person with experience in the education world" to be included on the Open Broadcasting Authority and authority to be advised by practising teachers.

# Maths retraining

In addition to the 10 colleges invited by the Education Secretary to put on courses for teachers wishing to re-train for mathematics (TES, March 4) similar courses are already running at the West London Institute of Higher Education, North London Polytechnic, Worcester College of Higher Education and Kent University in association with Christ Church College, Canterbury.

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**PERSONAL COLUMN**

**John Rae**

**Out of step on the strap**

I am opposed to the use of corporal punishment in schools. That is a personal view. The Headmasters' Conference adopts a neutral stance, wishing neither to block nor to facilitate moves towards abolition. I think that stance is correct and realistic.

It would be quite wrong for the HMC to declare itself on an issue on which opposing views are sincerely held within its membership. In this, HMC's position is somewhat different from that of other teachers' organizations. All teachers' organizations are likely to agree that so long as corporal punishment is not banned by law the decision to use it or not is one for the individual school.

But whereas the HMC therefore remains neutral, other teachers' organizations have declared themselves in favour of the retention of corporal punishment. This attitude, in my view, reflects a widening gap between public schools and maintained schools on this question.

It would be an oversimplification to say that corporal punishment is now largely a maintained school phenomenon but there is little doubt that its use has declined much faster in the public schools. I am not suggesting that this is necessarily to the public schools' credit; they do after all enjoy many advantages when it comes to establishing acceptable levels of order.

On the other hand, there is a certain irony in the fact that these schools, so long associated in the public imagination with flogging (remember that grotesquely exaggerated scene in *IF...*), should now be giving the lead in the rest of the country in the matter of abolition.

This claim on behalf of the public schools may well be contested. I admit that it is very difficult to establish what exactly current practical numbers of public schools where corporal punishment is used even as a last resort (though with characteristic British distaste of premeditated change, the practice is I am sure, fading away).

I am aware that in many public schools corporal punishment is used very rarely and never by boys. To the officers of STOP, the Society of Teachers Opposed to

Physical Punishment—this may not be good enough but it is a very remarkable climate nevertheless. Not is the trend likely to be reversed. For masters working in schools where corporal punishment has been abolished, they believe that to reintroduce corporal punishment would cause irreparable damage to the fabric of relationships. It is only fair to put the contrary argument that if corporal punishment is used without damaging relationships the school must be a very good one indeed.)

Where corporal punishment is still used in public schools, the rationale is usually that there are some occasions and some boys for whom this quick, limited response by authority is best. I think this is a better one than the officers of STOP recognize. There are times when it does appear more humane to punish a boy quickly and get it over with rather than involve him and the staff in a long drawn out expression of disapproval.

STOP would argue that while the punishment may be quick, the psychological consequences could be long term. I can see the psychological argument and I recognize that there is a connection between corporal punishment in school and adult abnormality. And yet the argument is not entirely convincing. There does not seem to be any evidence that the extraordinary violence of routine school punishment in any sexual abnormalities in the adult society. It is corporal punishment or just our feeling of guilt about it that does the psychological damage?

# Pressure group wants serious approach to sex education

A national organization for sex education will be set up next month after a conference at Loughborough University. The new body will press the Government to take sex education seriously and will campaign to have the subject included in nearly every school.

Four organizations are sponsoring the conference on April 16 and 17. The aim is to set up a national coordinating agency "dedicated to the advancement of education in sex and personal relationships as an integral part of the school curriculum", according to a leaflet advertising the event.

Although the sponsors say they will not be bound by any decisions taken at the conference, there is a growing groundswell of opinion among voluntary agencies working in the field that a central organization is needed. The Family Planning Association, the National Youth Bureau, the Campaign for Homosexual Equality and the Albany Trust have all backed the venture.

The leaflet says that groups with specific or minority interests find that they are not catered for. "A broader and nationally articulated level of work is necessary in order that sex education can become part of the curriculum in the vast majority of schools."

"The rationale behind this move is obvious to anyone who has worked to relieve the problems thrown up in the lives of young people whose ignorance about their own bodies and their emotions leads them to seek help, perhaps in a state of crisis when prevention is too late and all that we can do is try to put things right."

"No one wants to see young people distressed by unwanted pregnancies, venereal disease, or depressed and worried about their sexual orientation."

Mr Trevor Locke, an information officer at the National Youth Bureau, said there were many disparate voices in the voluntary sector. "It seems logical that there should be some voice at a national level."

"Some of the bigger agencies like the Family Planning Association have always complained about the inadequacy of sex education in schools but they are not big enough to do anything about it. A national body would achieve some progress."

# Buyers queue up as Surrey school goes on sale

Prospective buyers are already queuing for a sight of Ottershaw, the boarding school which Surrey County Council decided to close last week as an economy measure. First arrivals on the scene were two Arabys who visited the school last weekend in the company of a county valuer and an officer from the education department.

This news sparked off fears among parents and well-wishers trying to keep the school open that the decision to close Ottershaw has yet to be ratified by the Education Secretary, Mrs Shirley Williams.

Paradoxically the news has also raised the hopes of other supporters of the school in continuing as a joint enterprise between the buyers and the county council.

Surrey officials were reluctant to comment on the affair but Mr E. B. Tweedie, deputy education officer, said: "We are not in any way trying to pre-empt Mrs Williams's decision but it would be silly to lose prospective purchasers. Several school but that is all. There will be no negotiations until Mrs Williams has made her decision."

The idea of a joint enterprise was pure speculation.

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# Real enemies are the college lecturers

by Bert Lodge

A classroom teacher laying the blame for fallen standards squarely on inspectors will be the most welcome feature, in many a staff room, of the latest Black Paper published this week.

Twice in the last month highly critical reports of teaching have been issued by IIM Inspectors, particularly in regard to mathematics, science and modern languages.

Other features more familiar continue the jeremiad against progressive education begun with the first Black Paper in 1969. Comprehensive are judged to be failing, the Plowden philosophy of informal teaching has failed, current pattern of teacher training is all wrong, there is a clash of values among academics and teachers who do not support comprehensives do not get promoted.

The editors, Professor C. B. Cox, Manchester University, and Dr Rhodes Boyson, MP, call for national examinations for all pupils at seven, 11 and at 14 or 15 with each school's results published. New methods should first be tried in one or two experimental schools and there should be a society of conflicting values. No further expansion of university education should be contemplated.

Testing the arithmetic of children arriving from primary school to the comprehensive, where he is head of mathematics, Mr Levy found that out of 240 pupils, 85 could not subtract 47 from 92, 112 could not multiply 54 by 7, and only eight got the correct answer when set to subtract £4.47 from £13.24.

Looking at the Inner London Education Authority's own test, Mr

Levy found that last year 21 questions out of 50 required no arithmetic at all. "This year," he writes, "the greatest test of a child's ability to add numbers is 4+5+7+8+4+4+5. Division ventures into a three-digit dividend only once with 150 divided by 5."

Mr Levy asks: "Where does one lay most blame for the present situation? I think in fairness it must be placed at the doors of the most powerful people—the inspectors. Candidates for promotion are short-listed for vacancies by inspectors... teachers tend to express agreement with the policies of such powerful people."

Mr Levy says he wrote to all heads of mathematics departments in London and found they overwhelmingly shared his concern. Yet challenging any current policy of the inspectorate is a near-impossible task. He suggests inspectors should spend a great deal less time organizing in-service training and a great deal more time visiting schools.

Mr R. W. Baldwin, chairman of the governors of Manchester Grammar School, produces figures from nationwide exam results to show that the switch to comprehensive has not raised educational performance. When he published similar figures last year he was criticized for not having allowed for the effect on the comprehensives of having the more potentially able pupils "creamed off" to the selective schools.

Mr Baldwin maintains that he has now adjusted his statistics to take this factor into account. By comparing the percentage of grammar or grammar plus technical pupils in maintained selective schools in 1966 with the figure for 1974 he finds an increase of just



No much so wrong—in the eyes of Boyson, Cox, Baldwin and Moore.

under 3 per cent. Relative performance figures are corrected for creaming by transferring from the grammar schools to the comprehensive and similarly cobbling the selective sector figures.

The adjusted figures show that by 1975 percentages of pupils leaving school with at least one A level were: comprehensive, 11.59, selective, 14.51; with at least two A levels, 8.76 and 11.68; at least three A levels, 5.36 and 7.90.

"Those with high IQs can study more subjects more quickly and intensively and should be encouraged in their own and the country's interest to do so," Mr Baldwin writes. "At some stage they must be selected, and whether at 11, or a later date, by streaming in comprehensive, or an entry to higher education, is a matter on which many opinions can be held."

Reprinting a section of the Audit report on William Tyndale School, the editors say that the free-choice

day and associated activities accepted procedures in education. "In our view, enemies of education are still sending out so many teachers indoctrinated by the philosophy."

The present system of training either takes good out of schools altogether or wrong sort of people ending up as teachers, writes Mr R. W. Baldwin, a former grammar school teacher and now a lecturer at the Borough College of Education.

He suggests that inspectors should first spend a vision of an experienced trainer. Anyone not suitable he weeded out at that stage. Accepted would become approved, with a salary, and two years become fully qualified.

Mr Stephen Woodley refers survey commissioned by the Educational Supplement in which showed 70 per cent of teachers were in favour of grammar schools. Yet a number of that majority believe a senior post in grammar school likely to be given as a Black Paper if he ceases his misgivings.

In a contribution, among others of less than two pages Patrick Moore, the astronomer, writes from letters he has received from teachers that their senses will deny the schools during the past 15 years so has been disastrous.

The editors urge that papers should return to the publishers if they are interested for vocational in engineering, the professions, business.

Direct grant schools should be reabsorbed into the state and used as super-selective schools.

Black Paper, 1977, edited by C. B. Cox and Rhodes Boyson, pp. 11.65.

## At the risk of using a hackneyed phrase, Disraeli's dictum 'lies, damned lies and statistics' rules, OK?—Desmond Nuttall replies to R. W. Baldwin

In criticising the 1976 Education Act and the trauma of reorganization, R. W. Baldwin says: "But problems and difficulties do not go away because they are awkward and unpopular. Instead they may be swept under the carpet and statistics manipulated to hide the true situation." Mr Baldwin's arguments are based on his study and manipulation of the published DES statistics. Has he hidden the true situation?

The problem that bedevils a fair comparison of comprehensive and un-reorganized schools is creaming. A system of un-reorganized schools manifestly embraces pupils from the whole ability range, but a system of nominally comprehensive schools does not necessarily do so—witness the Inner London Education Authority.

In earlier work (The Great Comprehensive Gamble), Mr Baldwin acknowledged the existence of creaming and attempted a crude quantification of its effect. He argued that if the discrepancy between the comprehensive and the un-reorganized schools was solely the result of creaming in the third of the comprehensive schools then the proportion of leavers from the creamed comprehensives with

five or more O levels, for example, would have to be only 38 per cent from un-reorganized schools—a difference which he claimed was "not credible".

But he failed to notice that his own figures revealed that secondary modern schools produced only 25 per cent of the proportion of such leavers from un-reorganized schools as a whole. Creamed comprehensives thus performed some 50 per cent better than secondary moderns—a very credible and creditable achievement.

In the latest Black Paper Mr Baldwin has developed a more sophisticated method of dealing with the problem of creaming. He shows that the proportion of 13-year-olds in selective schools (grammar plus technical) has risen from 23.47 per cent in 1968 (when there were virtually no comprehensive schools) to 26.43 per cent in 1974 (when 61 per cent of 13-year-olds were in comprehensive schools).

The creaming effect, he argues, is therefore of the order of 3 per cent. Returning to his analysis of school leavers, he suggests that the effect of creaming is therefore nullified if 3 per cent of the pupils in the un-reorganized sector are "transferred" to the comprehensive sector and given examination results at the grammar school rate. After these

adjustments the performance of leavers from the comprehensive sector still lags behind that of leavers from the un-reorganized sector.

Thus Mr Baldwin disposed of creaming? Superficially, his procedure is certainly an improvement, but when one turns to the numbers involved in the "transfer" one begins to wonder. In 1974, one method allocates the comprehensive schools the noble sum of 7,750 leavers of grammar school calibre in addition to their total of 380,150 leavers. A paltry increase of 2 per cent.

Of course, there are some areas where there is no creaming (within the maintained sector) at all, but even with this in mind it seems difficult to believe that nationwide, comprehensive schools lose only 2 per cent of the full ability range. A detailed analysis of reorganization, i.e. by L.E.A. might clarify the position, but all that is clear here is that many creamed pupils at Mr Baldwin's figures.

Even if his method is basically correct, it is highly likely that the examination results of "transferred" school leavers have been underestimated. Assuming for the sake of argument that four out of five creamed schools are not creamed at all, the fifth would lose 10 per cent of its potential intake.

Yet his method is only crediting these pupils with the examination results of the typical grammar school leaver. Should not this cream of 10 per cent be expected to do better than the norm of 25 per cent? Nevertheless, in fairness to Mr Baldwin, it should be pointed out that giving each of these "transferred" pupils three or more A level passes is still not going to close the attainment gap between comprehensive and un-reorganized schools, though the gap will narrow.

Related to the problem of creaming is the location of the remaining school leavers in the un-reorganized sector. A disproportionate number of these schools are in middle class areas, where the fight for and against comprehensive education has been at its most bitter and long drawn out. Better examination performance, irrespective of school attended, is expected from such areas but Mr Baldwin has made no attempt to control for such factors.

He is not comparing like with like. Another possible source of error in the comparison, with more serious consequences for his results, arises from his unavoidable exclusion of the A level results of students in colleges of further education. These students currently account for about one-third of all A level entries. Many will have been classified as school leavers with modest attainments in DES surveys, yet go on via further education to good A levels.

If the proportion of such students who have come from comprehensive schools is the same as the proportion of 13-year-olds in comprehensive schools three years earlier, his argument is unshaken. If, as is more likely, a higher proportion of pupils from comprehensive schools than from un-reorganized schools do their A levels in further education colleges, then he is again not comparing like with like.

Without the figures (which are not nationally available) one cannot be sure what correction should be applied to his own corrections to allow for these effects, but it must have the effect of again narrowing, if not closing, the gap.

The Black Paper article lays most emphasis on A levels, unlike Mr Baldwin's previous paper which looked at all levels from CSE to A level and which revealed the

enormous results for compared with most CSE and O level indicators, even without the creaming correction. Yet he has no comparison in generalizing his claims to all levels of the comprehensive school, and a careful dissection of the fair revealed evidence is revealed several times.

It is unfortunate that published statistics cannot be used to refute Mr Baldwin's figures. I have made enough points to show that his methods, though steady improving, still leave much to be desired. At the risk of using a hackneyed phrase, Disraeli's dictum "lies, damned lies, and statistics" rules, OK?

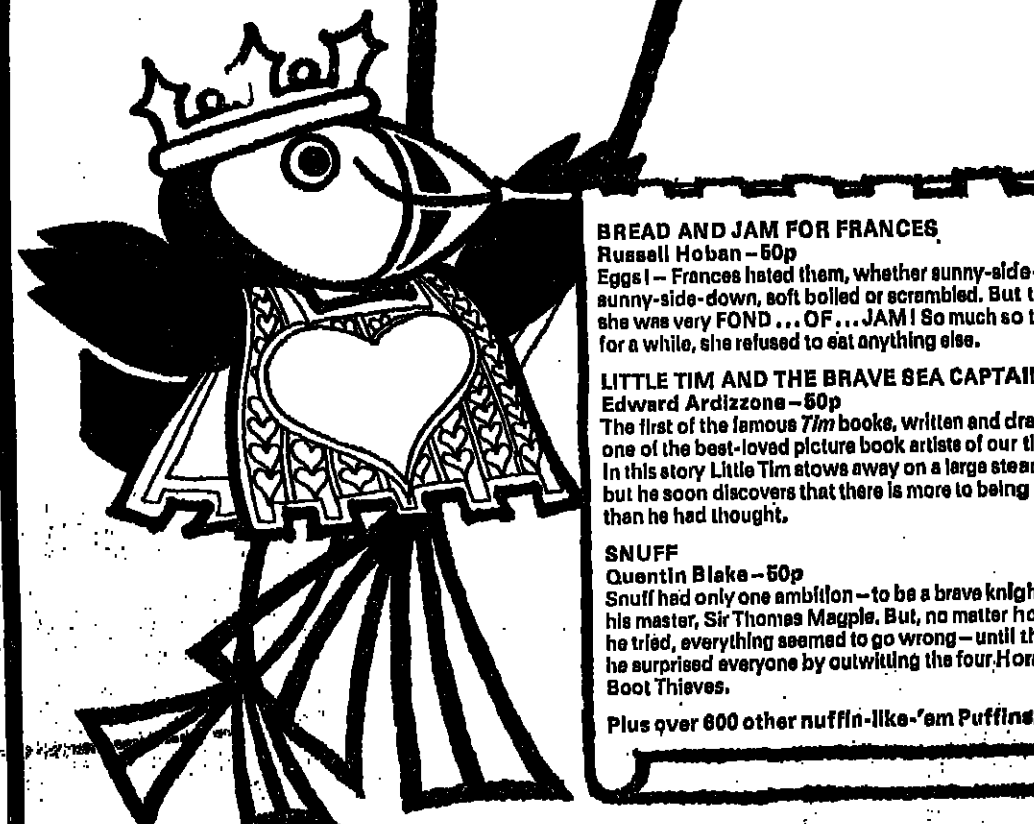
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# Birmingham: Round 5 of the Great Debate. Bob Doe reports

## Too many senior staff are doing too little teaching

The small amount of teaching done by senior staff dominated Birmingham's session of the Great Debate last week.

There was so much concern about it, said Mrs Shirley Williams, the Education Secretary, at the end of her second regional conference, that she would ask the inspectorate to look into it.

But the Department of Education and Science said this week that it would be covered by the 10 per cent sample survey of staffing already announced by them (TES, February 25).

The matter was raised by Mr Conrad Rainbow, Lancashire's chief education officer, who said: "A major priority is a shift of minor administrative burdens to the youngest and least experienced thus lightening their teaching loads."

The small amount of teaching done by heads, their several deputies and heads of departments, year groups, tutor groups and houses was "horrifying".

Changing this would help to raise standards. "I see in schools a slackness, an acceptance of second-rate work and a failure to extend pupils." He wanted a new Education Act incorporating "a new philosophy, a new sense of direction and a new impetus".

He also wanted a far more rele-

vant final year to compulsory schooling. He suggested courses constructed jointly with industry, starting at 15 which might contribute on a credits basis to apprenticeships. He criticized industry for their poor record on day-release.

A common European leaving certificate at 18 could mean dispensing with exams at 16. Prospective employers could also benefit from "a two-way parents-school report resulting in an agreed, composite document".

Mr Rainbow, an I.M.I. for 10 years, wanted the inspectorate to be strengthened and made more independent of the DES.

Mr Peter Inskeep, National Association of Schoolmasters/Union of Women Teachers, echoed the concern about senior teachers. "It really is absolute nonsense that the better you are at teaching the less you do. Teachers on £5,000 a year are doing secretarial work."

There was all-round support for a national common core curriculum. Mr Ron Cocking, a Birmingham head teacher and treasurer of the NAS/UWT, stated his categorical belief that a great number of teachers would welcome more positive guidance on a core curriculum.

He wanted a core drawn up by a Schools Council reformed to include representatives of parents and industry, and to give schools firmer guidance than at present.

Children had a right to numeracy, the skills of communication and an understanding of industry and society. But along with the rights of their parents went responsibilities to attend school, to work and not disrupt and a responsibility to be interested and involved in the child's education.

Mr P. J. Martin, vice-president of the Headmasters' Association, was in favour of a common core, but not a common curriculum. Sixteen-year-olds were over examined, he said, but the common core elements tended to be under examined. The non-core subjects should be "freed from the shackles of exams".

Support for the common core did not always extend to a nationally contrived or imposed one. Mr L. E. Anderson, a member of the NUT attending as part of the West Midlands TUC group, wanted more spontaneity in the curriculum, such as the cooperation between primary and secondary schools under Birmingham's consortium arrangements for groups of schools.

Mr M. J. Huxley, chief education officer for Northamptonshire, said: "We have got to depend on an existing core and on the findings of consortia and other local initiatives. We could make a lot of progress if a serious study was made of good local practice—there is a great deal of it going on."

But Mr R. W. Pearson, Birmingham Chairman of Commerce, wanted some compulsion to be attached to the common core. "If some don't like it, they must do something about that and so must we."

Two voices were raised against the common core principle. Mr H. Marks, who identified himself as a former Birmingham Education Committee member and a school governor, but who was on the DES list as coming from the TUC, did not want "children moulded into a pattern for industry". Diversity was important.

Mr C. W. Phillips, chief education officer for Derbyshire, had doubts about the common core. "A high degree of flexibility could do a lot of children a good turn. We must not sacrifice diversity built up over the past years."

Mr Michael Adams, Cheshire education officer, said that the English board of Education, which had prepared a new word to the DES. To literacy was the core in the core he wanted to see. He wanted to see a curriculum which was not too narrow and which was not too academic. He wanted to see a curriculum which was not too narrow and which was not too academic.

Mr G. J. D. Nixon, director of education at Walsall, accused the DES of setting their sights too low. He expected only three years of training from teachers. He was troubled by the training of 16-year-olds, by the training of 16-year-olds, by the training of 16-year-olds.

Dame Margaret Miles, a former headmistress, said: "Structure the induction year to maintain confidence is vital." It could be financed if 16-plus centres were phased out.

Dr Brian Twidale, principal of Westfield College, London, said that schools should be made to improve the qualifications of their teachers, especially in mathematics.

W. I. Browne, National Association of Teachers in Further and Higher Education, said 12 per cent of time in primary schools was devoted to mathematics but only 10 per cent of a teacher's training.

Mr Alan Evans, NUT, said the stock of teachers was not as good as the profession dropped. He wanted more spent on in-service training.

Summing up, Mrs Williams said it was clear that many wanted more spent on in-service training. As the DES inspectorate, who have carried out a survey of further education provision for the handicapped throughout the country.

## Row as handicapped are refused jobs cash

Mark Jackson

Handicapped school leavers are denied a share in the government money which has been made available for training and job preparation for jobless teenagers. The Manpower Services Commission, which was set up in 1972, has refused to provide or fund courses for them.

The agreement, entered into by the prime ministers of education and industry, was intended to provide a "bridge" between the two sectors. It allocated responsibility for the vocational training of "the young" to the Ministry of Education and to the Minister of Education and to subjects like home economics and moral studies.

The circular explains that it is important that training courses for fifth-formers, a core of education of sex and careers advice, and arithmetic should be provided for all children. It also states that the industrial out-look dominates.

But it does emphasize that despite the general lines of demarcation agreed, and whatever machinery is adopted, the primary object must be to ensure that the handicapped get the training they need to pre-employ. Many leavers end up as jobless.

The circular, issued at a time when educationally subnormal youngsters were considered as "or less hopelessly unemployable," was issued to the effect that the physically handicapped and to explain as well as a respect for learning power Services Commission which spends £430m a year, offered the agreement as an explanation why it refused to provide any material help for a course which Somerset education department is running to prepare unemployed ESN or emotionally handicapped school leavers for work.

The TSA's Cardiff regional office told the county that it did not support courses such as this, which were being run by a number of L.E.A.s, because courses were available in Government employment resettlement centres.

And, despite the 1945 circular's insistence that training for the handicapped young should be segregated, the agency claimed that an important advantage of the government courses was that they gave the youngsters a chance to mix with adults "in the workshop situation, which is seen as an essential part of work preparation."

Mr Frank Robinson, Somerset's education officer for careers, said: "Most of the youngsters we are trying to help would not stand a chance of getting on an ERC course. They need very patient help on a personal basis."

It is ridiculous to suggest that an important part of the course is working in various departments of the Somerset College of Art and Technology in very close contact with the administration and maintenance staff.

Mr Robinson was angry at a suggestion by the MSC that a reason why his course could not be funded as a special form of work experience or of vocational preparation was that it had too high an educational content.

"It is almost entirely practical," he said, "with a great deal of practice in actual industrial processes, and instruction in living skills that these youngsters badly need to hold down a job—like learning how to use public transport."

In its evidence to the Warnock Committee, the commission is saying that the agreement continues to be the basis for all the Training Services Agency's decisions over the vocational training of handicapped young people. But it is in process of drawing up a "detailed strategic plan" for the treatment of all the disabled, and is particularly aware of the problem of the young and mentally handicapped.

A report is also now being prepared by a working party of the DES inspectorate, who have carried out a survey of further education provision for the handicapped throughout the country.



## Pupils can make a good meal of menus

Children should help to plan menus for school meals as part of their nutrition education, according to Miss Gwen Burman, a health education officer with Avon area health authority.

Miss Burman, who put the idea to a meeting of school meals organizers at Coventry on Saturday, was sure that such schemes could work. She quoted the school meals service in Milwaukee, Wisconsin, which daily serves 75,000 of the cheapest school meals in the United States.

"Here students and teachers representing a cross-section of the system's schools regularly sit down to plan and taste and to determine the type of food to be served. Surprisingly, the pupils do not demand hamburger—hot dog—soup type of meals," she said.

She told the meals organizers this could be one of the most effective ways of carrying out nutritional education although it was rarely practised. On the question of cost she said: "It is unrealistic to put this at the end of the list of priorities but it is right to start with the concept that the food should be varied and attractive. Food is meant to be enjoyed. Obviously nutritional standards only become effective if it is."

Warning that good nutritional standards could be undone in the school tuck shop, she said schools would have to persuade children that wise eating was normal practice.

Mr Robert Aitken, Coventry's director of education, told the organizers they were playing an important part in children's lives. In many cases providing the only balanced meal they were likely to get during the day.

The withdrawal of teachers from meals duty in many schools had led to a regrettable deterioration in the training and care of children and placed an unfair burden on untrained helpers.

Staffordshire Education Committee were being brought into line with the rest of Staffordshire because £12,000 had been wasted last year. "Sometimes only a tiny proportion of the meals that were ordered were actually eaten."

## Report attacks schools rivalry

Special schooling should not be regarded as a rival system to integrated education according to a report published by the National Foundation for Educational Research this week.

Views on integration are unnecessarily polarised, it says. The two systems are seen as competitors and rivals when they could be complementary—exchanging information, expertise and resources.

The report, *Towards Integration*, is a study by Manika Jamison, Malcolm Parlett and Keith Peckington of blind and partially sighted children in ordinary schools, but they say, many of their observations and conclusions apply to special education in general.

Their report suggests that special schools could play a crucial part in an expanded system of integrated education by serving as regional resource and assessment centres, running vocational training programmes, organising courses for teachers in ordinary schools which have visually handicapped pupils. They could also be used as a base for peripatetic advisory teachers and providing pre-school training and counselling for parents of handicapped children.

*Towards Integration. A Study of Blind and Partially Sighted Children in Ordinary Schools*, NFER Publishing Company, 2 Jennings Buildings, Thomas Avenue, Windsor, Berkshire. Price 16.25.

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Shaken or slugged? Faces at the conference.



# The man from 'Auntie'

Since John Robinson joined the BBC 17 years ago the number of educational programmes on radio has more than doubled and BTV programmes have risen from under 10 hours to more than 500. Altogether, the BBC now spends more than £9m on educational broadcasting, including the £3m for Open University programmes from the DES.

"Our broadcasting services are split into three groups: for schools, further education and the Open University", said Mr Robinson. "My job is to enable our advisory councils to function more effectively in the areas of school broadcasting and further adult education."

He first worked as a teacher and then became an area further education officer in East Sussex. When he joined the BBC in 1960 as further education liaison officer there were only three hours of further education on radio each week and none on television. His job was to get in touch with other educational bodies and make people more aware of the BBC's output in this field. He believes his teaching experience has been a great help.

"A large number of our staff are ex-teachers so, although many, like me, have only worked under the old system in grammar or secondary schools, at least we have some practical knowledge of what education is about. During my time at the BBC I have been mainly concerned with FE and the Open University, so I am now having to make myself equally well informed about school broadcasting. As far as our budget is concerned, this is the area which is creating our most immediate problems."

The BBC's budget for educational broadcasting is split almost equally between the three sectors. Present cuts are no more than the average for all programmes—around 15 per cent.

"This type of cut, although regrettable, does not really affect us all that much. It may mean, for instance, that we will have to make part of our French programmes in the studio instead of in France."

"More worrying are the cuts that have taken place in the schools. Many schools are finding it difficult to keep their technical staffs. They can't afford them. Even the amount of tape is being restricted."

"This is going to have serious repercussions especially in secondary schools. Primary teachers, who are in charge of one group of children all day, can usually arrange for them to watch a programme at the time it is put over. Secondary pupils, who have much more complicated timetables, are often not able to see or hear a programme at the time of the broadcast. It is essential for them that programmes can be recorded and played back later."

The School Broadcasting Council is hoping to discuss this with representatives from schools all



John Robinson has been appointed education secretary at the BBC with responsibilities to the School Broadcasting Council and the Further Education Advisory Council. He talks about his job to Betka Zamoyska

over the country. It would like local education authorities to set up their own media resources centres so that all schools in one area can pool equipment and materials and fewer technicians would be needed.

"The resources could become part of the present teachers' centres if they had room for them. By collaborating, the schools would have a wider range of materials to choose from. This might persuade some teachers to make more use of audio-visual aids. Our educational officers would also be able to get a more regular feedback on our programmes. Teachers could submit any criticisms or ideas they might have to the centres, and schools could advise us on where we could help to supplement the curriculum."

Besides the actual programmes the BBC now provides textbooks for their language courses. Most educational series have their teachers' notes and pupil packs.

"Again, we are faced with a terrible problem in the publications side. Schools cannot afford to buy them in the way they used to and we are having to stop printing some of our sets. This is bothering schools that want to order more."

"We don't aim to make a profit on school publications, so most of them are at an economic price. Still, we have to allow that some of our pamphlets must help to support others. Those aimed at Scottish schools, for instance, or intended to meet minority interests often have to be subsidised. We may have to be more ruthless about these."

During the present recession, he believes, educational broadcasting must concentrate on meeting basic needs. "We cannot afford to be too innovative or we will merely become an extra luxury that most schools cannot afford."

Their programme viewing figures show that there is a much greater response to programmes for the primary age group and for further education and adults than at the secondary level.

"If we are to provide a useful service to secondary schools, we must become an essential resource

that, in turn, saves other resources. Teachers must find our mathematics series better than a set of textbooks, for instance.

"It is a pity that teacher training colleges often fail to train staff in the use of media. Our programmes should not be put on so that the teacher can take a rest. He should either have seen or heard the programme first or studied the teacher's notes so that he could prepare his class for written work and other assignments to follow up with. In this way it could become an integrated part of the lesson."

Besides being a learning resource that would support the textbook, educational broadcasting is also taking on a much greater function as a community service. As a result of the literacy programme, *On the Move*, more than 100,000 adults have applied to educational centres for help.

Other programmes which have had a wide response are the *60, 70, 80 Show*, which provides guidance and gives ideas for study and other interests to retired people. The language courses are also popular, both in the home and at language centres.

"We are now planning a number of programmes on which we will cooperate with local authorities and other bodies. The literacy project was very successful in this way. By linking up with remedial centres all over the country, we were able to help a number of people who would never have come forward in other circumstances. We are planning a series for the handicapped, which will be backed up by help from local organizations."

Unfortunately, with the present cuts, we have to be careful not to arouse expectations that cannot be met. It is no good stimulating interest in riding for the handicapped if there are few openings for those who want to take it up. Lessons never have come forward in other circumstances. We are planning a series for the handicapped, which will be backed up by help from local organizations."

"As in our programmes for older people, we are trying to persuade the handicapped to be more resourceful in themselves and to capitalize on their own experiences. It is an excellent way of meeting the demands of local authorities, although with our literacy project we managed to embarrass some of them into making much greater efforts."

Mr Robinson's policy for educational broadcasting in the immediate future is to concentrate on the three Bs: essentials, extension and evaluation. The essential task is to improve the basic skills of language, literacy and numeracy. Communication and social understanding should be broadened and the imagination stimulated.

The use of broadcasting should be extended by training teachers in audio-visual methods and by collaborating with other educational and welfare bodies.

There should also be more careful evaluation of the use made of a particular programme and what is gained from it. It is arranged for the Cambridge Local Examinations Syndicate to supply an examination at the end of the course. It is purely voluntary and there is no pass or fail, but it means that students will have a written assessment of their progress and will have some idea of the effectiveness of the course.

The difficulty is that the more we do, the more we find needs to be done and it is the most difficult time to do it.

## Crisis point reached in teaching

A shortage of specialist teachers has brought the teaching profession to a crisis point, the order of education ministers said this week.

In a statement issued by the Department of Education, the subject held last week, the Order rejected a survey of the situation in secondary schools for the autumn as inadequate.

It calls instead for a thorough inquiry into religious education conducted by HM Inspector of Schools, which will be held last year. In London, the Order says, understaffing and untrained teachers.

One comprehensive scheme for religious education is being put out to schools. Another is for 1,000 pupils and teachers and only seven are providing religious education for only the first year.

The inefficiency of the schools, offering religious education for public examinations, offered it at A level, GCE and AS at CSE. "Thoughts of the subjects in the hands of the candidates of the examination, the chairman of the working party.

In a foreword, Professor James, Open University, said that too many educationalists "are valuing the honouring of the above all else, the desire for rewards for the subject, or the subsequent, the educational, or the historical, or the cultural."

Curriculum Christianity: the Classroom, Unity Press.

## Disenchanted with leavers

London businessmen are disenchanted with the abolition of school leavers' centres and are planning to move part of the capital. A spokesman of the London Chamber of Commerce says "lack of, and low general standards of, among young people."

But in the memorandum, he says the businessmen are taking some of the responsibility for the situation that they themselves often implicate about their leavers and offer help in willing to set up such a centre. The businessmen say schools are biased against leavers and also complain of too many committees "on them, which is really needed in some degree of operation between industry and schools."

## Ulster trainees to be cut by half

by Paul McGill

Speculation about the future of Northern Ireland's colleges of education increased last week following the disclosure that Lord Melchett, Minister for Education, intends to cut their intake to 700 in September.

The news was given to the Advisory Committee on the Supply and Training of Teachers, which had recommended a figure of 1,000. The intake of 700, which does not include entrants to Derry Technical College, or to colleges in Belfast, compares with 1,373 last year and more than 1,900 in 1974.

Lord Melchett told a meeting of the advisory committee last Friday that priority had been given to the creation of employment during the past two years, they must now match intake to the colleges with wastage from the profession.

There was uncertainty about wastage rates, he said, but he refused to give details of these until after his public announcement of the new intake levels.

However, a paper prepared by the Department of Education gave the current wastage rate as 3 per cent net, consisting of 5 per cent wastage less 2 per cent re-employment. In the five latest years for which published statistics are available, the wastage rates ranged from 6.4 per cent to 7.9 per cent. Many members of the committee were sceptical of the department's figures.

The department also gave details of the likely distribution of the 19,200 teaching posts which will exist in 1981 and on which the new intake levels are based. There will be 280 nursery, 8,400 primary, 9,650 secondary and 290 special and peripatetic teachers plus 580 teachers in in-service training.

Lord Melchett believes that the intake to the New University of Ulster should be reduced by only six, and that of the polytechnic by seven. Thus the total of Queen's University and the three general colleges of education.



Lord Melchett: matching intake to wastage.

Even if Queen's agrees to confine its intake to 80 compared with 173 last year, this leaves only 340 for the three general colleges.

Assuming equal numbers doing three and four-year courses, this would produce colleges of fewer than 300 students, so talk of closures, or at least mergers, has been much in the air.

In one respect the Minister has exceeded the advisory committee's advice. The committee suggested that "free trade" students (going to Britain) should be restricted to about 10, but the Minister intends to allow a much higher figure, possibly 100.

## Cuts could put the clock back

Cuts in spending could set back progress in education by 10 years, Mr Bill Braiden, chairman of the Council for Educational Advance, said this week.

He told the annual meeting of the council in London that although the organization had campaigned for two years against the cuts it now had to concentrate on protecting a perspective of what the education service should achieve.

"There is a danger," he said, "that the deterioration in educational provision may set back the development of progress in education for a decade or more, but it is still our duty to show how the education service should be developed and to keep firmly within our sights the aims for which the CEA was founded."

Prospects may at present seem grim for the achievement of targets for all our children, for the riddance of our schools of the thousands of obsolete and insanitary buildings which still exist, and for a realistic level of provision for the non-statutory areas of education, but it is the duty of the CEA to keep these aims firmly before the public and the policy-makers and to demonstrate to them a programme for real educational advance."

## Secret file protester resigns

A Hampshire teacher will claim today that she lost her job after protesting about secret files on children.

Miss Phyllis Bellchambers, a teacher for 30 years at Bay House secondary school, Gosport, who has now resigned, has taken her employers — Hampshire County Council — to an industrial tribunal at Southampton.

Miss Bellchambers opposed the introduction of secret record cards four years ago when they were introduced into schools.

She claims she was accused of disloyalty to the school after complaining that wanted parents to have right of access to the cards. If they had, a lot of things would not be written down. Some of the comments could be libellous.

Miss Bellchambers said parents should be able to correct wrong information in the files, particularly about personal home circumstances. "Children have human rights too," she said. A spokesman said the county council would be defending the action. "Our claim will be based on the fact that our conduct towards her has always been fair and reasonable and therefore there is no justification for her to resign."

## Cautious yes to family advice

Experiments in the intermediate treatment of young offenders—referring them to an advice centre and keeping them at home rather than putting them in care—have not been an unqualified success, says a report from the National Children's Bureau.

The report studied seven family advice centres in London, Birmingham, Barry, Macclesfield and Newcastle. Though these were set up by social workers, the idea was to help local people identify their own needs and provide a service for young offenders or children at risk were encouraged to do something constructive as an alternative to delinquency.

Some became involved in running adventure playgrounds, holiday play centres and a window cleaning scheme for old people's flats. The survey found that education welfare workers almost invariably opposed the projects' attempts to involve parents.

But project staff reported a significant number of young people were attracted towards the centres and almost half of the truants or delinquents.

quents showed notable improvement. Some of the resentment was generated within the community, however. There were complaints that too much money was being spent on delinquents.

The researchers comment: "We have no valid criteria for stating the time and money spent on any individual child or family was justified by the results, except by referring to the cost of social service, police and court cost proceedings and the cost of residential care, assessment and remand centres, community homes or prisons." Approving remarks by local policemen and probation officers are also quoted.

In its final recommendations the report recommends that central government share with local authorities the cost of providing intermediate treatment facilities, with more money spent on staff and schemes should be run in cooperation with area teams of local authority social services departments. On the job training schemes for intermediate treatment staff should be run at centres which currently provide community and youth work courses.

Intermediate Treatment, National Children's Bureau, 8 Wukley Street, London EC1.

## Schools know most about kids

Of all the agencies concerned with young people appearing before juvenile courts, schools are likely to know the most about them.

This is a main conclusion of a working party under Professor Ronald Davie of Cardiff University, set up by the Children's Regional Planning Committee for Wales. It represented magistrates, clerks, social services, health authorities, education, probation services and police to propose and monitor communications systems, and local liaison groups.

Its most important recommendation is that the high-level committee should have to make a public annual report. It believes that no one agency can be responsible for ensuring the consultation system is working. The most effective spur is public and political pressure, and published reports would provide material for informed comment.

policy makers, at national and local level, as much as professionals on the ground for this. It goes further in the 1975 report of the Common Expenditure Committee in recommending specific machinery to deal with this.

It proposes two levels of regular liaison: high-level committees representing magistrates, clerks, social services, health authorities, education, probation services and police to propose and monitor communications systems, and local liaison groups.

Its most important recommendation is that the high-level committee should have to make a public annual report. It believes that no one agency can be responsible for ensuring the consultation system is working. The most effective spur is public and political pressure, and published reports would provide material for informed comment.

The working party did find weaknesses in consultation machinery between police, social services, education and probation services, and between police, schools and courts (it blames the

## Great Debate is 'ignoring blacks'

Black professionals working in education are angry that the Great Debate is ignoring crucial questions about how education can be geared to a multi-racial society.

At a conference convened by the Community Relations Commission at the request of black educationists (black, in this group, was taken to include Asian, West Indian, African, Cypriot, Chinese and Portuguese minorities), 70 delegates complained of the lip-service paid to the notion of multi-cultural education.

They demanded that more than token attention should be paid to several aspects: teacher training, career opportunities for black

teachers, giving blacks more say in curriculum, research into ethnic minorities, school management, and policy-making at all levels.

They concluded that "too many children are leaving school poorly qualified for a shrinking job market, alienated from the mainstream of society by their school experience, discriminated against by employers and rejected by, as well as reflecting, the majority white society."

"The education service cannot divert attention from these disturbing facts by focusing attention on studies which deliberately omits

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### Bristol Polytechnic

# Powerful passions about genes

Genetic manipulation now seems destined to succeed nuclear energy as the lightning rod for public passions about the supposed malevolent practices of scientists.

This, at least, was the impression with which I left a conference on the subject organized by the United States National Academy of Sciences in Washington two weeks ago. What was intended as a means by which the genetic manipulators could explain themselves in public—the conference was called a forum—turned out to be a vehicle for an unparalleled display of rudeness.

The proceedings began inauspiciously, when one Jeremy Rifkin, representing a radical organization called the People's Business Commission, demanded the right to address the audience of 1,000 people to complain not merely that with the advent of genetic manipulation the end of the world was at hand but that the meeting had in any case been improperly organized.

As he began to speak a group of his supporters occupying a whole row of the auditorium unfurled from their pockets banners saying genetic manipulation must stop. The neatness of the banners, held up on extensible aluminium poles, was an ironic tribute to the marvels of United States technology.

Rifkin's chief point was that the interest of academic scientists in

## Science diary by John Maddox

the new techniques for incorporating foreign genes in bacteria and other microorganisms has been prompted by the malign interest of the pharmaceutical and chemical manufacturers. He went on to ask that all those speaking at the conference should first make a public declaration of the sources of financial support for their research and even of their personal incomes.

To everybody's surprise, this was faithfully adopted by the succeeding speakers. Only on the third day (when Rifkin himself was absent) no doubt engaged on some other inflammatory public demonstration) did he get the answer he desired—one of the country's most distinguished microbiologists explained that he did not think anybody else's business to know where his income came from but, since he had been asked, he lived on his university pension, some contributions from social security and "a few hundred dollars in lecture fees".

The conference was also remarkable for the heck abuse that close colleagues were willing to hurl at each other in public. There was, for example, a bizarre exchange between Professor Bertie Davies and Dr Jonathan Beckwith, both from the same department at Harvard. Davies had questioned a remark in Beckwith's keynote speech against genetic manipulation.

Beckwith's reply went like this: "I'm sorry that Dr Davies has been unable to understand what I was saying. It's not my fault. But I will send him a copy of my paper. It will give him all the information he needs to understand what I said. I hope that he can read more accurately than he can listen." Even Beckwith's half of the audience found this a little breathtaking.

In all kinds of other ways, the meeting failed to be a meeting of minds. People came along with their prejudices, and carried them away intact. Part of the trouble was the way in which the programme had been carefully balanced, with the pros and antis following each other at the restaurant in some formal dinner.

The genetic manipulators tended to make modest statements of the potential benefits of their craft, in helping to understand how genes function and ultimately in more practical applications, and their opponents tended to reply that once people embarked on the modification of the genes of the humble bug *E. coli* there would be nothing to prevent the "reversion of the human gene pool".

That was the opinion of Professor George Wald, the distinguished biologist from Harvard University, who also dropped heavy hints that

Hitler's career had begun in interest in the party of the man genetic stock. Wald, Professor Ruth Hubbard (who hurled) replied to one of sources of insulin may soon adequate and the genetic union might be the best way of replenishing them, with the breathtaking suggestion that the line was not really necessary treat diabetes—diet and exercise were sufficient.

One of the curious features of the debate, such as it was, was, identified by the names "genetic" and "philosophical" took place over the more immediate question of the genetic manipulation was tried out without endangering life health.

In practice, however, the States seems to be moving and sensibly towards genetic manipulation. The Institutes of Health, has been created because there is no as yet for basic biological research control the activities of industry in the United States is recommended to restrict and prior disclosure of the patent will undertake in such fields.



Victorian War protesters. They have to meet now on genetic manipulation.

In all the circumstances perhaps the overriding question is why the issue of genetic manipulation should stir such powerful passions, at least in the United States. On reflection, I am persuaded that this is, indeed, an American phenomenon and, with luck, it is likely to remain so.

Part of the trouble is that the momentum of the protest against the Vietnam War has spilled over into protests against nuclear power stations and genetic manipulation. There is a host of outsiders looking for a cause.

But that is not the whole story; by a long chalk, it is my opinion that the social damage done in the United States by the concentration of the Vietnam War and the Watergate scandal has left a responsible public opinion government and the "establishment", universities and university states included.

To come to that conclusion, it is only necessary to consider the intellectual plight of the members of what President Richard Nixon used to call the "silent majority" people who loyally supported the American Government throughout the 1960s and who turned their ears to the public protests against the war, only in the end to discover that the war could not be won and that the presidency itself was corrupt.

It will be a long time before such people are prepared to take on trust even the most serious and honest statements by scientists of what they hope to accomplish with genetic manipulation.

# Sport Old rivals in ring

by Stanley Levenson

Paul Loveless and Kevin O'Donnell must be getting sick of the sight of each other. But if they knock each other about a bit tomorrow it will be both justifiable and legal.

For Loveless (Stanwell Comprehensive School, Ponarth) and O'Donnell (St Bonaventure School, Newham, London) are old rivals in schools boxing and share the ring in the national championships at Pontin's Holiday Camp, Blackpool. Last year O'Donnell outpointed Loveless in the Junior 51kg division, but two months later lost to him in the England-Wales schools international match.

Tomorrow, they will be in opposing corners in the intermediate 57kg category. It is extremely rare for a repeat final to occur in schools

## Girls score a treble

Great Britain continues to dominate the annual European Catholic Students cross-country championship for girls. For the third successive year at Louvain University, Belgium, British runners recently took all three team events. Belgium was second.

The 26-member British team was managed by Mr Bill Graves, head of the English and drama department at St Joseph's School, Taunton, Merseyside, and an Amateur Athletics Association coach. The championship was divided into three age groups—junior, (born 1959-60); cadets (1961-62) and minims (1963-64). Karen Locke, of St Joseph's School, Widnes, won the minims race, with Patricia Brannely, Archbishop McNulty School, Stoke, and Berandete Fox, St. Margaret's Clitheroe School, Manchester, second and third.

The cadets' race was won by Joanne Simcock, of St Dominic's School, Stoke. Helen Burgen, St Edmund Campion School, Bradford, was second, and a Belgian girl, third.

The only event in which Great Britain failed to take the top spot was the junior race, which was won by a Belgian, Catherine Bell, Cardinal Wiseman School, Coventry was runner-up and Susan Lever, St Cuthbert's School, Bolton, was third.

The championship, which is organized by the European Catholic Students Federation, was first held three years ago. The British team has yet to be beaten. Other countries taking part were: Ireland, Holland, France, Luxembourg, Italy, Spain, Portugal, and Malta.

## Handicapped in the swim

Swimming competitions for handicapped children might soon be a regular feature of the schools swimming scene. This is one of the topics to be discussed tomorrow at the annual meeting of the English Schools' Swimming Association in Grimsby.

Grimsby was chosen for the meeting because a local teacher, Mr Cliff Arnold, is to be installed as the new president of the ESSA. Last week at Port Talbot on the opposite coast, England, as usual, easily won the home countries' international schools competition with 162 points; the Scots were second

with 111 and Wales (85) and Ireland (82) third and fourth.

The outstanding performer was, not surprisingly, Britain's fastest freestyle, Cheryl Brazendale, of Gramscote High School, Blackpool, who won the junior event in 59.6sec, only a tiny fraction slower than her own British senior record.

Miss Brazendale is the first sub-60sec British girl swimmer in a 50 metres pool and her swim in this distance at the Lido pool confirms her potential.

The best performance by the host team was Vanessa Hullock's victory in the intermediate 100m freestyle. Welsh senior record time of 60.7sec.

England won only one of the junior boys' events but took both relays. It was a tight squeeze in the 4 by 50m freestyle; the English boys edged home by 50c, the Welsh second in 1min 55sec, just half a second ahead of the Scots.

## Kim leaves a reminder

by Asif Khan

When Kim Wilkinson says farewell to her school, Nicholas Chamberlaine mixed comprehensive, Basingstoke, in July, she will leave behind a permanent reminder of a great achievement in the shape of a two-foot high shield named after her.

The Warwickshire school instituted the Kim Wilkinson Trophy to commemorate her selection for the Monixal Olympics swimming squad last year. She was the first pupil in the school's 25-year history to be chosen for an Olympic team.

The trophy is to be presented to the winners of the 1,600-pupil school's annual inter-county (house) swimming competition. It was designed by Kim's fifth-year sister, Mrs Norma Lewis and Mr John Haynes. Mrs Lewis said last week: "Fifth-year children raised the money for the trophy by holding raffles, discos and various other activities. The trophy was their idea."

The daughter of a Bedfordshire traffic warden, 15-year-old Kim has been swimming since she was two and a half. She is a member of the City of Coventry Swimming Club, where she is guided by Mr Hamilton Bland, a former Olympic coach and television commentator.



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At the double at Sandhurst.

## Milfield keep their titles

Milfield retained the team and overall individual titles at the schoolboys' tetraathlon championships held at the weekend at the Royal Military Academy, Sandhurst. More than 60 boys from 27 schools took part. All the winners were from different schools. Results: Individual: Swimming—1, C. Humpage (Milfield); 2, A. Jackson (Blythe, Stoke-on-Trent); 3, S. Shaw (Whigsfield). Running—1, S. Lupton (Taunton); 2, A. Brodie (Eton). Shooting—1, J. Livesey (Whigsfield); 2, O. Tomlinson (Epsom).

## Scots' first win

Scotland's girl volleyballers gained their first win over England in a two-match under-16 international at Grangemouth last week. They won 15-7, 3-15, 17-7, 15-12.

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She has now set her sights on the next Olympics in Moscow. Mrs Lewis said: "We've watched her career since she joined the school in 1972 and we've been behind her all the way. She has worked tremendously hard."

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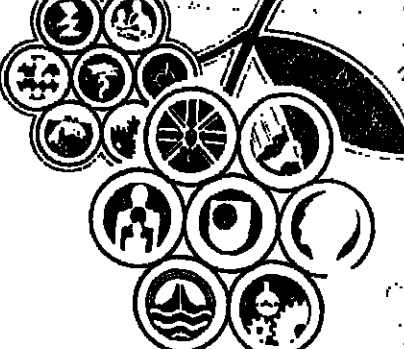
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# When did you last see your education officer?

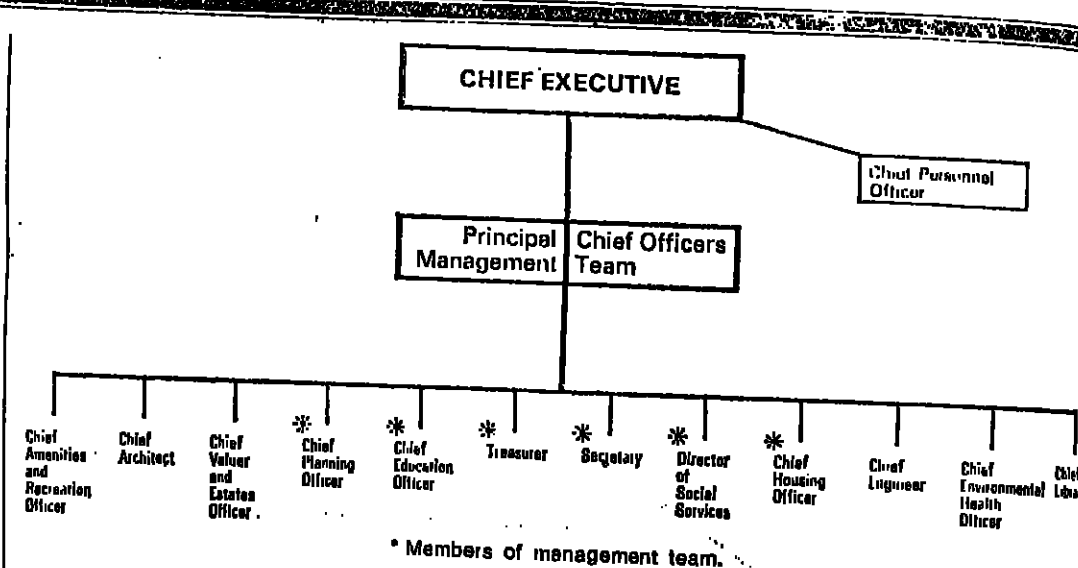
In the second of a two-part series on corporate management, Patricia Rowan examines how money, time and people can be wasted by the new layers of management, what the effect is on teachers, and whether it is worthwhile for education to remain in local government

Corporate management is not likely to go away. Shortage of money will make it more essential to plan resources centrally, and the corporate voice is stronger than that of education. Some have argued that education would be better off out of local government. Such a root-and-branch approach is unlikely, but evidence suggests that other solutions are possible. There are places where corporate management works, programmes are still more important than administrators, and education can even benefit rather than suffer. The voice of education will have to be heard very loud elsewhere, however, if it is to regain control over its own service or even stop things getting worse. And much bad management, over-management and many ill-conceived structures will need to be unscrambled.

## They don't understand

"I would like to see a Marks and Spencer's approach", said G. R. Pritchett, director of education for Oldham, who wants to do away with unnecessary paperwork and the departments that generate it. His thesis was that Bains had imposed layers of management which employed too many people, wasted time and cost too much. The man in the street gained nothing from this administrative machinery, so it would be better to save on that than cut the budgets of the service departments. It is, of course, impossible to calculate whether corporate management costs more, because reorganization rules out direct comparisons. But you can add up the salaries. The old town clerk has probably been replaced by at least three officers: the chief executive, solicitor, and secretary (or administration director). These last two posts are sometimes combined as Bains recommended, but then there is the new personnel officer. It is of the essence of corporate management that the central control departments—finance, legal, administration, personnel—all unconnected with the services, will have expanded. In one metropolitan district with both a borough secretary and solicitor, the director of education reckons the entire secretary's department of 62 people could be cut. It prepares agendas and minutes for all council committees, a useful source of corporate information, but this used to be done within departments as a by-product of other work. Now, since the secretary has little detailed knowledge has had to take on two extra staff to process, explain, advise and check. It is not the only place where they find the extra men from legal and administration superfluous, though in Kent—Bains's old county—the education department prepare their own reports and minutes, and a secretary's department is considered expensive and cumbersome. Nor does Kent have a corporate planning unit. "If corporate management means anything it is a corporate approach by

In last week's article Gordon Moore complained that many authorities just copied the diagrams from Bains, without reading the text. None of the diagrams caused more trouble than this one, with its chief personnel officer curiously attached to the Chief Executive. In this case, the text did not help much either: "He should have direct access to the chief executive and not be subordinated to any other chief officer. Chief officers in other departments will be expected to accept and act on the advice of the personnel officer on matters within his specialized knowledge." In some places this has been taken to mean carte blanche for personnel, never mind where the specialized knowledge ends. Respected senior CEOs unflinch their lips and hiss, "the director of personnel is a trouble-maker, in the pocket of the chief executive." Rather than the only authority where the personnel director is paid more than the education director, and has his own name on advertisements for teacher jobs. It is one of the many authorities where the personnel director is the control element in management. There is no doubt of the need for an experienced central personnel staff to advise on complicated industrial relations legislation and recruitment negotiations, as well as recruitment, training, welfare and career development. But personnel becomes a sensitive area, and frequently a battle-



ground when, in spite of lip-service to the division between advice and line management, its officers and committees take over day-to-day decisions without consultation or "specialized knowledge." Often the battle is over interpretation rather than principle. It is common for teaching and non-teaching staff by personnel, and non-teaching staff by personnel. But who gives the dinner ladies and groundmen their instructions? Where do youth workers and nursery assistants fit in? One education director wanted to include the last two groups in his training programmes, but he lost out when the personnel director gave the chairman of policy committee a kick, and murmured, "don't give them that." Personnel meet their Waterloo in colleges and polytechnics, whose articles of government give them control over their own non-teaching staffs pay and conditions, though the l.e.a.s. pays the bills. This has led to prolonged engagements in Bradford between the corporate men and Eric Robinson, principal of Bradford College and one of the few fighters tough enough to keep them at bay. Bradford personnel have some useful ideas on induction, in-service training and career development, and on how to seek incompetent teachers, that are probably overdue in education. They also want a say on teacher numbers, staff structures and the points system. "The main problem," says Brian McAndrew, the chief personnel officer, "is a certain conservatism in education, united against all comers." For Richard Knight, the education director, the main problem is the time it takes to argue out such issues.

the people doing the job", says W. H. Perry, the CEO there, "not the addition of corporate managers." The Bains report recommended that any corporate planning unit (which would mean additional costs, compensated for in improved efficiency) should be staffed by officers from the various departments to keep it in close touch with reality, "rather than creating a separate permanent unit staffed by 'professional' corporate planners." Units staffed by corporate managers have, however, proliferated like the secretariats, and similarly absorb departmental energy: "trying to get through to people who don't understand what they need to know about what's going on to make a corporate decision," said one CEO voicing the views of many. One good thing to come out of corporate planning in Oldham, for example, was an under-fives report, but that does not need a separate unit. In Cambridgeshire the chief executive, John Barratt, is developing a system which makes the departments feel less imposed upon. Instead of building up central services, the department with most work in the field is given control of any joint project. Some chief executives in search of a role, however, have built up corporate planning units to form their own personal staff. Bains recommended that the chief executive should have no department of his own, but this has sometimes led to a feeling of insecurity. There is evidence to support this neurosis, since several district councils in recent months have decided that their chief executives were superfluous or interfering, and saved a quick £10,000 a year by sacking them. It has not happened yet in an l.e.a., but there are contracts coming up for renewal which may be vulnerable to political change in May. There is little question that the position of Birmingham's chief executive, F. J. C. Anson, is uneasy since the Conservatives took control last May, gave up corporate management, and whittled down his own department to practically nothing by disbanding the Central Intelligence Unit and Performance Review Unit. Their duties were allocated to appropriate departments, and among the major items listed—from employment conditions to urban renewal—the grass cutting review was handed over to amenities and recreation. Grass-cutting is always a potent cause of interdepartmental friction. That's the trouble with dual-use playing fields.

The machinery needed to be dismantled, but cutting out that highly-paid layer of management did not lead to quick savings, nor could it. There are costly laws about employment and redundancy, and corporate planners are as local government and conscientious as any other government men. There were 17 on the unit staff (it was planned to rise to 33) and a corporate planner for each of the six major spending departments. A few have got jobs elsewhere, most have been found other work within the departments. Money saving is not the only issue. Once a structure exists, work is found for it, and corporate planners need to justify their existence. In Bradford they are proud to have 1,500 less employees than in the nine pre-1974 authorities in their area. There are only six people in the corporate planning unit, and it is not in the chief executive's department. But the unit and central management services create work for themselves and others, and not just because they have difficulty understanding how education and social services work. Together with the abrasive chief executive, Gordon Moore, they contribute to a City Hall atmosphere somewhere between stimulation and intolerable strain. Last October the corporate planning unit produced their Metplan, 98 pages listing Bradford's corporate objectives and action targets for 1976-77. Gordon Moore proclaims it as one of the few spirited attempts anywhere at a corporate package. But all that Metplan consists of is a list of one year's activities for everyone in every department, from "maintain school contacts with employers through 800 industrial visits" and "increase the general level of awareness of what is available in the field of the arts" to "effectively maintain in good condition the existing 400 litter bins" and "investigate complaints of general nuisance within 24 hours". It does not say how often noses will be blown or wastepaper baskets emptied, but there will not be much time for that, or any departmental work, if the corporate planning unit is to be serviced with information. The director of educational services, Richard Knight, lists as one of his personal objectives "to keep at least one day a week clear of official duties". He chooses Saturday. Bradford management services recently made news when they bugged staff telephones calls and estimated that permanent

monitoring could save Bradford £12,000 a year. That might depend on whether they had more reliable and detailed information than they collected when they decided each school could manage with only one telephone. They based their report on a visit to one school. But schools are different shapes and sizes. One telephone won't do for a split-site school, ancillary staff may have to walk the length of the building to answer in another. When a schools check was made on the provisions of the Health and Safety at Work Act, firemen were allowed to move desks around to their safety standards. It was not possible to teach services like that, but management did not know. Bradford may spend less than the national average on central administrative employees, but how do you compute the cost of the extra work they give the service departments?

## Corporate punishment

Education is torn two ways by the demands of the management team. Properly used, it can work to the service's advantage, as well as increasing efficiency. But how much time does it take? And what role should its members play? The Bains report says the management team should be the principal planning forum at officer level, and that chief officers have much to contribute outside their own fields. But it says nothing about how often the team should meet, and states ambiguously: "Its members do not attend primarily as representatives of particular departments, though on occasion it will be necessary for them to speak in that capacity." In practice, authorities have been ambivalent or confused on these points—especially the second—the chief officers allowed to attend on the grounds that their chief is there as a manager, not a representative. But every CEO thinks it his duty to the public and the service to speak up, and if necessary fight, for education at all meetings. And many think that the team meets too often, for discussions of poor

quality and little use. (Often every chief officer attends, because rivalries make it difficult to keep down to the top six, as Bains recommended.) Some CEOs bring few major issues for discussion with the team because they are not given the careful consideration they merit. Ten-year development plans for schools have gone through on the nod because no one understood them. For their part, the education men do not feel they need to hear about redevelopment plans for houses and roads once a week, when they could be out visiting a school. One director of education calculated that it costs £200 a week in officers' time just to be sitting round a table discussing management affairs. A member of a deputy's group on corporate matters, which some places run as a second team, passes his time contemplating "a group of 12 people at £10,000 a year producing useless papers once a fortnight". On the other hand, there is agreement that some exchange of ideas is useful, that education will not be consulted on vital matters if it isn't there on the team, and that the big spender is less resented if other officers get a chance to understand education's work. In Oldham, G. R. Pritchett found that management team negotiations saved money for schools while council house rents were put up. In Manchester, Dudley Vicks argued that it was useful for the management team to take part in the revenue budget exercise this year, "last year the finance side could pick up off one at a time". In Bradford, a large part of the £750,000 found in a money-saving exercise was allocated to school buildings. There are two l.e.a.s. where the education officer has experience both on and off the management team. Both can see its advantages. In Birmingham, all the chief officers were critical of the wasted time at meetings. Now that the corporate system has been torn up and thrown away, Kenneth Brooksbank, the CEO, feels the pendulum has swung too far. "To dissolve into departments as we have done has deprived us of something valuable. I know less about what is happening in Birmingham now. It is important that we get a machinery for chief officers' meetings again." Stuart Johnson, in Leeds, began as a member of a seven-man team, was taken off it when Labour, in minority control, reduced it to three, and put back when the Conservatives regained power last year. "I was happier when I was off the management team, but the service suffered because capital programme decisions were harder to fight." Now the team meets two days a week "a time which could be more usefully employed seeing heads, supporting colleagues, visiting areas. I can't keep sufficiently in touch". Elsewhere, the teams meet once a week or fortnight, though once a month is thought enough in Kent. Professor M. Stewart, director of the Institute of Local Government Studies, sums up the folly of too frequent meetings: "Some management teams meet weekly with 45 items on the agenda. That shows a failure to discriminate, and is a valid area of complaint. They should be concentrating on framework and key areas, not overloading the systems." Richard Knight, in Bradford, spends two and a half days every week in management work, most of it "battling like hell" against the encroachments of central services. He cannot keep abreast of education in the time he can give it, is criticized on all sides for not visiting schools, and admits: "I don't think I can represent my department sufficiently". Since Bradford accepted Bains's dictum that a deputy chief officer was unnecessary, there is no one with an overall view of education. Gordon Moore, the chief executive, now says "you could argue that we should have built in a deputy". Having said that professional management skills were all that was required from his directors, "a director of education could come from any discipline", Gordon Moore is now prepared to admit that some specialist relevance is needed—perhaps 75 per cent management, 25 per cent service. Richard Knight is able to do quite a

# When did you last see your education officer?

lot with his educational hat on, such as getting nearly every councillor on to a governing or managing body, so that they are more committed to schools. But even more is expected out of his 25 per cent. His most demanding current project is to advise on an evaluation exercise of what's spent on education. Gordon Moore argues that since two thirds of resources go on education, and every industrialist he meets complains about "the rubbish you're turning out from schools", it is time to probe standards and use of equipment. "No, we can't wait for national guidance on standards. There's nothing in this world which cannot be reviewed." Richard Knight in his turn has made it clear he does not accept that everything can be measured. But it is pretty obvious which hat he will have to wear in management team on this one.

Teachers in classrooms may not be much aware of the system that shapes their lives, but it is only too evident to their union leaders and to school and college heads. Accustomed to dealing on a common ground over the years with education committees and departments, they have been brought abruptly to realize that the focus of decision may have shifted. This presents a particular dilemma for the unions, when crucial negotiations are taking place over teacher numbers, ratios and redeployment. With a CEO or chairman who talked on the same wavelength, they could do a bit of wheeler-dealing and mutual arm-twisting, and feel confident they were getting the best possible deal. Now that they find that talking to the CEO means they are sometimes not talking to the man who takes the decisions, the unions wonder whether they might be better off negotiating direct with the chief executive, treasurer or personnel. When they do, they run into the problem that they are dealing with administrators who do not understand the language of teaching, and frequently do not know a pupil-teacher ratio from a park bench. It is no accident that many authorities which have run into trouble with the unions in recent months have developed corporate management systems which tend to bypass their education committees and departments. In Oxfordshire, where the finance committee decided, without consulting education, to cut teacher numbers: Oldham, where policy and resources worsened pupil-teacher ratios; and so on, through Stockport to the Avon dispute over sacked part-timers. By contrast in Manchester, where the corporate ethos is weak and education is strong, there is a successful redeployment programme; in Kent, where it is not at odds with education, money has been made available to keep ratios steady in tune with population changes. Some local union reps concede that they may get a better deal from personnel departments, who understand teachers unions better than professional educators do. In Bradford, N.A.S. representative Morris Calvert said it was an advantage to get the same conditions of service as other council employees, when that meant you got a mileage allowance for using your car on school trips—something education never allowed. In at least one other l.e.a., teacher unions have taken to making demands direct to land and personnel, as well as education, and playing them off against each other. Some of the more experienced education officers think the unions could be playing a dangerous game by backing a two-way horse, and head them off where they can from dealing direct with policy or personnel, who will give them less sensitive treatment and more pain.

## Who do we talk to?

Teachers in classrooms may not be much aware of the system that shapes their lives, but it is only too evident to their union leaders and to school and college heads. Accustomed to dealing on a common ground over the years with education committees and departments, they have been brought abruptly to realize that the focus of decision may have shifted. This presents a particular dilemma for the unions, when crucial negotiations are taking place over teacher numbers, ratios and redeployment. With a CEO or chairman who talked on the same wavelength, they could do a bit of wheeler-dealing and mutual arm-twisting, and feel confident they were getting the best possible deal. Now that they find that talking to the CEO means they are sometimes not talking to the man who takes the decisions, the unions wonder whether they might be better off negotiating direct with the chief executive, treasurer or personnel. When they do, they run into the problem that they are dealing with administrators who do not understand the language of teaching, and frequently do not know a pupil-teacher ratio from a park bench. It is no accident that many authorities which have run into trouble with the unions in recent months have developed corporate management systems which tend to bypass their education committees and departments. In Oxfordshire, where the finance committee decided, without consulting education, to cut teacher numbers: Oldham, where policy and resources worsened pupil-teacher ratios; and so on, through Stockport to the Avon dispute over sacked part-timers. By contrast in Manchester, where the corporate ethos is weak and education is strong, there is a successful redeployment programme; in Kent, where it is not at odds with education, money has been made available to keep ratios steady in tune with population changes. Some local union reps concede that they may get a better deal from personnel departments, who understand teachers unions better than professional educators do. In Bradford, N.A.S. representative Morris Calvert said it was an advantage to get the same conditions of service as other council employees, when that meant you got a mileage allowance for using your car on school trips—something education never allowed. In at least one other l.e.a., teacher unions have taken to making demands direct to land and personnel, as well as education, and playing them off against each other. Some of the more experienced education officers think the unions could be playing a dangerous game by backing a two-way horse, and head them off where they can from dealing direct with policy or personnel, who will give them less sensitive treatment and more pain. Nationally, NUT and NAS leaders are

aware that negotiations that stick can depend on the strength and background of education directors and chairmen. The 1974 reorganization threw up a lot of inexperienced committee chairmen, and changes in the May elections could prevent them with another batch who do not know their way around. They also share a widespread misgiving that reorganization led to the early retirement of some of the outstanding CEOs, and that some of their replacements were chosen primarily for management team, rather than departmental, potential. School and college heads run into difficulties with management systems where there is no clear line of responsibility from them up through the education department to the top. This was shown at its most extreme in Avon. As all the heads said bitterly at the time of Derrick Williams's resignation, where once they had dealt with the education committee, the CEO and his advisers, they now had to deal direct with personnel, estate services, land and buildings, county architects, solicitors and highways. A year before he resigned, Derrick Williams wrote to all Avon's chief officers, recording a widespread resentment "that heads of schools are being treated as if they have no managerial responsibility for their establishments... indeed, they are being treated as if they were subordinate clerical staff of central departments under [their] direct control and disposition." Heads have had their work complicated and powers eroded elsewhere. Trouble is likely to arise where personnel have taken over complete control of non-teaching staff, and land and buildings for estates, or amenities and recreation) assumed direction of the use of buildings or playing fields. At Rotherham, for instance, school-based groundmen are answerable not to the head, but to amenities and recreation; responsibility for swimming instructors at a pool on a school campus had to be wrested back after a battle with the parks committee; the opening of a school extension was arranged not by the head and deputy director, but by legal and administration, who had to be told how to do it by the education department. Now of course dual use of resources is a suitable candidate for the corporate approach, and works very well where the system is under control. In Kent and Cambridgeshire responsibilities are clearly defined, personnel is there to advise, and operations left to the service departments. Schools and teacher unions deal only through the CEO. But where there are too many masters, heads are over-worked, undermined and, like the teacher unions, uncertain which department to turn to.

you have decided not to build housing estates without schools, and accepted that problem areas coincide. But much work that concerns education deeply right now—in employment, health, even law-enforcement—is going on outside the local government set-up, on a national or regional basis, or in an overlapping county tier. When youth employment and training is a national preoccupation, it is important to have a consistent plan carrying them through from school, careers advice, training and retraining, schemes for first help, and so on. But national advice on career services and youth budgets is being ignored by councils making cutbacks, and the TSA and MSC have no role in local government. "If we work with them we are turning our back on the local government set-up," said one CEO. "It has to be done on a national basis. The answer cannot be left to peeling off places, where the city treasurer has a prejudice against youth, and any question about people has to go to the personnel committee, whether it is conditions of service for labourers or youth employment." Health, of course, was lost to local government in the 1974 reorganization, and school medical services went with it. Already assessment of children with behavioural disturbances, which a DES circular recommended should be carried out by l.e.a.s, as it used to be by the school medical service, is being duplicated by area health authorities. Surely any corporate planning of local services should deal with that sort of overlap? Gordon Moore agrees that no corporate planning can achieve everything without meshing also with county, regional and national agencies, and that the framework imposed by the 1972 Local Government Act was a disaster, and impossible to work satisfactorily with its current functions and arbitrary divisions. He is a committed corporate and local government man, so it is hardly surprising if others, who identify with education rather than local government, use that argument to support the view that education would be better off on its own. But are there any viable alternatives whose benefits to education would outweigh the terrible upheavals of another reorganization? Following the health service out looks less and less attractive, as the evidence to the Royal Commission demonstrates that area health authorities have just the same managerial deficiencies as the corporate systems, without electoral redress. Area education boards would have delivered themselves into the clutches of the Treasury. And ad hoc local bodies like directly elected education councils would still have to be financed. Opinion in Whitehall would postpone any action until we have a regional solution which could mean a split, with schools run locally, and higher and further going to the regions. It would be a bold, or mad, planner, who thought it could be tackled for another ten or 15 years, especially in the present state of the devolution debate. Education is such a large part of local government that the structure could become meaningless without it—especially when there are voices in the social services (which have their share of corporate complaints) suggesting that they go in with health. In the end, decisions based on Leyfield and Killbrandon are more likely than the urgent cries of the "not at any price" men to lead to change. The SEO does not pack a lot of muscle-power, the teacher voice is not united, and DES policy for influencing local authority treatment of education is now planned firmly on specific grants. The department still believes that education should be a national service, locally run. So long as it is run efficiently, they are not interested in the style of management. The DES view is all the more likely to be decisive now it is clear that the AEC is dead, and that CLEA is unlikely to replace it with a strong national view for education. This is all part of the same story. Power and concern in local government have swung away from social and community services. There is also common ground with housing and land development, but not a lot once that counts.

Would education be better off out of local government? A temptation to declare UDI lurks within the speeches of most critics of over-management. Lincolnshire's George Cooke, expression of the ultimate deterrent, "We are local government men, but not at any price," crops up as often as Gordon Moore's "teachers and dustmen" in corporate talk. Education is part of local government so that it can be responsive to local needs. Is there any point in it staying there if this is no longer true? Given the promise that there should be joint planning of policy and resources for the overlapping personal services which make up local government, is the right mix of services being planned together? The effect of the haphazard growth of local government has been that so many community needs are not met within it that it is hard to make sense of joint planning of what is there. In the l.e.a.s. education is usually intertwined with social and community services. There is also common ground with housing and land development, but not a lot once that counts.

## 'Not at any price'

Education is such a large part of local government that the structure could become meaningless without it—especially when there are voices in the social services (which have their share of corporate complaints) suggesting that they go in with health. In the end, decisions based on Leyfield and Killbrandon are more likely than the urgent cries of the "not at any price" men to lead to change. The SEO does not pack a lot of muscle-power, the teacher voice is not united, and DES policy for influencing local authority treatment of education is now planned firmly on specific grants. The department still believes that education should be a national service, locally run. So long as it is run efficiently, they are not interested in the style of management. The DES view is all the more likely to be decisive now it is clear that the AEC is dead, and that CLEA is unlikely to replace it with a strong national view for education. This is all part of the same story. Power and concern in local government have swung away from social and community services. There is also common ground with housing and land development, but not a lot once that counts.



# Where comprehensives score

Dorothy Davis finds that in one authority comprehensives can hold their own with selective schools on performance in examinations

No overall comparison has yet been made between the achievements of the selective and comprehensive systems of secondary education in terms of exam results. The difficulty is to find a completely non-selective system to compare with a completely selective one.

But there is at least one area in England where the necessary conditions exist. An analysis of the data from it indicates that the comprehensive system, taken as a whole, achieves better examination results than the selective system. But it shows, too, that crude comparisons of this order leave out much that is important.

One part of the area remained completely selective up to last year; the other has had a fully comprehensive system since 1969. The parts operated side by side, without intermixture or competition, and provide sufficiently large and comparable samples.

The results of exams taken in the summer of 1976 were collected, with related information, and on a uniform basis, by the education authority for the newly combined single area. They cover 7,000 pupils in 13 comprehensive schools in one part, and 5,000 pupils in 33 grammar and modern schools in the other. The main points are shown in the tables.

Table 1 compares the performance in O level passes (defined here as GCE O level, grades A-C, and the equivalent CSE grade 1) of the total school population aged 15 to 16 during the final compulsory school year. (Modern schools have no sixth year, although some pupils transfer obtained after the fifth year, or gained on A level exams, are not included.)

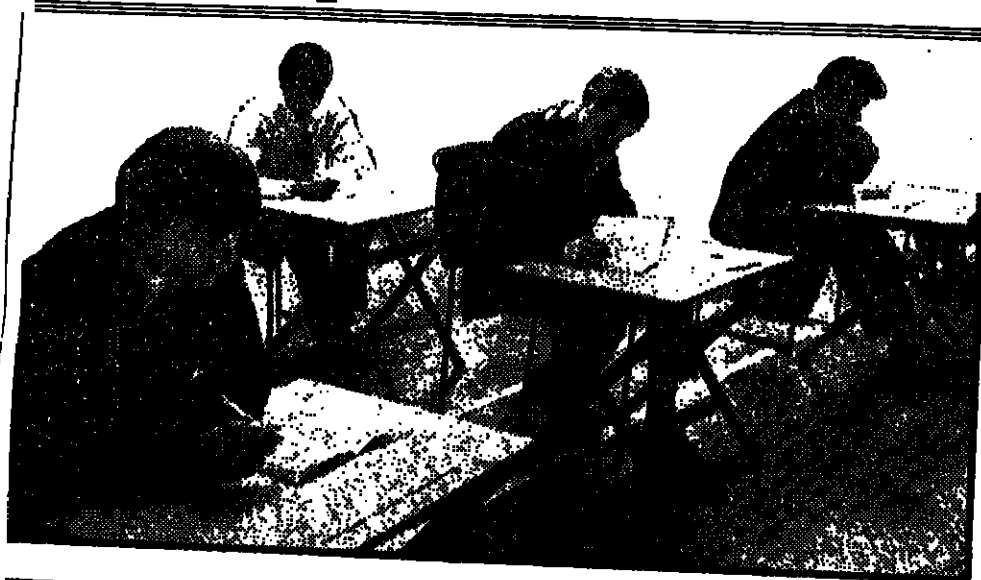
The table shows that a considerably higher proportion of pupils in the comprehensive than in the selective area gained one pass at least in their fifth year—49 per cent against 36 per cent. The same is true for three or more passes (27 per cent against 22 per cent). At the level of achievement measured by six or more passes, the proportion, at 12 per cent, is identical.

Proportions staying on, passing GCE A level and entering degree courses are set out in Tables 2 and 3. Pupils in the selective part could also pass at 16 to colleges of further education to take full-time A level courses, an option virtually non-existent in the comprehensive part. With this proviso, it will be seen that in comprehensive schools, 15 per cent of the total (fifth-year age group of 1974 went on to gain one or more A level passes in the seventh year of 1976; only 11 per cent did so in the selective part. Staying-on rates (18 per cent against 14 per cent) and numbers proceeding to degree courses (7 per cent against 6 per cent) also favoured the comprehensive schools.

If the comprehensive system produced better overall exam results, was this due to the structure of the school system? If a comparison is made not just between systems, but between schools within the same system, other perspectives are revealed.

Table 4 sets out the "best" and "worst" results obtained by each type of school—comprehensive, grammar, and modern. Evidently there are much greater differences between individual schools of the same type than between comprehensive and selective schools as such—a point obscured when results are averaged out.

Size of school is often assumed to be an important factor; and here as elsewhere, the comprehensives are all larger than their selective counterparts. But within neither system is there any relationship between order of size and exam success. In the 13 comprehensive schools, the correlation between size of fifth form and the number of O level/CSE (1) passes per pupil ( $r = 0.25$ ) is not significant. Nor is it in the case of



Results for individual schools are confidential to the officers and members of the authority. In the comprehensive part of the area (two schools have been omitted from the figures as being in competition with the only direct grant schools in the area. There are no independent schools of note in the area.

Table 1: Percentage of fifth-year pupils gaining GCE "O" level (grades A-C) and/or CSE (grade 1) in 1976

	Selective	Non-select
1 or more passes	36	49
3 or more passes	22	27
6 or more passes	12	12

Table 2: Percentage of all fifth-year pupils in 1974 who gained "A" levels in 1976

	Selective	Non-select
1 A level	2	4
2 A levels	4	7
3 or more A levels	5	11
1 or more A level	11	15

Table 3: Percentage of fifth-year pupils in 1974 who stayed on until 1976

	Selective	Non-select
Staying to 7th year	14	18
Proceeding to degree course	6	7

Table 4: Percentage of population in socio-economic classes I to VI in catchment areas of schools with "best" and "worst" results; and in whole areas.

Social class	Secondary modern		Whole select area	Comprehensive "Best"		Whole comp area
	"Best"	"Worst"		"Best"	"Worst"	
I & II	21.5	7.6	15.0	43.4	12.7	25.6
IIIa	20.4	15.0	11.2	17.9	8.0	10.9
IIIb	33.9	36.9	43.4	24.8	39.7	42.6
IV & V	17.8	31.8	28.2	13.0	19.7	19.5
VI (Misc.)	6.4	8.7	2.2	0.9	0.5	1.4
	100.0	100.0	100.0	100.0	100.0	100.0

the 25 secondary modern schools ( $r = 0.09$ ). And all the "worst" as well as all the "best" schools included in Table 4 are of moderate size.

Two other factors are worth consideration. One is the policy followed by schools in entering pupils for exams, the other the difference in the socio-economic character of catchment areas.

The authority here does not attempt to shape the policy of schools, either in choice of exam, or number of entries. But Table 5 shows a clear divergence in these respects between the comprehensive and selective systems. While the former averaged 6.5 subject-entries a pupil (O level and CSE combined) the average in the selective system was only 4.8. Table 6 shows a similar tendency at A level (2.7 entries a pupil in comprehensives, 2.5 in selective schools).

Again, there are big differences

Table 4: Highest and lowest percentage passes in GCE "O" level (A-C) and/or CSE (grade 1), by type of school (as percentage of fifth-year pupils)

Comprehensives	4 or more 3 or more 6 or more	
	Best school	Worst school
Best school	57	42
Worst school	19	32
Grammars		
Best school	100	100
Worst school	93	62
Moderns		
Best school	53	32
Worst school	8	1

Table 5: Entries and passes, O-level and/or CSE (grade 1), all fifth-year pupils in 1976

	Entries per pupil	Selective		Non-select	
		Passes per pupil	Passes per entry	Passes per pupil	Passes per entry
CBE	2.90	1.92	2.04	1.23	1.21
Entries per pupil	2.90	0.64	0.59		
Grade 1	0.37	4.46			
Passes per pupil	0.30	0.63			
Grades 2 to 5	2.28	3.60			
Passes per entry	0.13	0.14			
Grades 2 to 5	0.79	0.81			
Total "O" level and CSE entries per pupil	4.82	6.50			

Table 6: Entries and passes at "A" level, all seventh-year pupils in 1976

	Entries per pupil	Selective		Non-select	
		Passes per pupil	Passes per entry	Passes per pupil	Passes per entry
CBE	2.45	2.68			
Entries per pupil	1.83	1.92			
Passes per entry	0.77	0.72			

Table 7: Percentage of population in socio-economic classes I to VI in catchment areas of schools with "best" and "worst" results; and in whole areas.

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	100.0	100.0	100.0	100.0	100.0	100.0

between schools of the same type. One comprehensive averaged only five entries a pupil (both GCE O level and CSE) and another 2.7; one grammar school, 1.2 and another 9.7.

Do different policies adopted by individual schools have in turn a differential effect on pupils' chances? These particular comprehensive schools appear overall to have pursued (at the cost of marginally more failures) a far more generous policy for entering candidates than those in the selective system. Although (counting GCE and CSE together) more passes per pupil were achieved by the comprehensive than by the selective system, the extra passes do not keep pace with the extra entries. In other words, comprehensive schools dipped more deeply into the marginal candidates and for many pupils this paid off.

How far, then, does the school's choice of exam affect pupils' chances? In another way, how far would the pattern of results have differed had both of the area adopted a similar distribution of entries for GCE and CSE? To enter their pupils where they think they may do best. But Table 5 indicates that far entry policies may differ, how to gain are teachers' estimates of the chances, and how even slightly different traditions and practices must be taken into account when comparing results between different systems of organization, so long as two exams for the year-olds remain, and entry for either far from universal.

Table 7 sets out the socio-economic groups within the area served by the schools, as derived from the 1971 census. The comprehensive and selective parts of the area are very different socially, particularly in the contrast between the proportions of the population in social classes 1 to 3n (professional, managerial and skilled non-manual). It highlights the strong connexion between the social class of the catchment areas and the exam performance of schools.

The secondary modern school with the "best" results—superior even to those achieved by the average comprehensive—did the creaming off of some 24 per cent of top ability at 11-plus—is a markedly middle-class area. The comprehensive school with the "best" results—better than those of the weakest selective grammar school—is, once again, a notably well-to-do area. (Individual grammar schools do not have local catchment areas.)

A more detailed comparison can be made among eight of the comprehensive schools whose catchment areas can be analysed this way. In these, the correlation between the proportion of the population in social classes 1 to 3n at the number of passes a head of the group in O level and CSE(1) is a significant one ( $r = 0.732$ ). In both parts of the area, and in comparing individual schools, the same strong connexion appears here, as it does on a national scale, between social class and number staying on into the sixth form.

In all respects, the strong influence of the socio-economic factor appears to be right across differences between the selective and comprehensive systems. Comprehensive schools began in cities where the social ratings of their catchment areas tended to be lower than those of the selective areas round about, and not surprisingly, comparisons of academic performance reflected unfavourably on many of them.

This order is reversed in the present case. These comprehensives are all outer-suburban or small town. All the selective schools are in an industrial city—and one, moreover, where about one pupil in six is a recent immigrant still experiencing problems with English language.

Whatever qualifications may be introduced, it is plain that well-established comprehensives can hold their own in terms of exam performance, at least up to about average national standards—so far as national statistics permit such a comparison. Exams are only one yardstick, even of an academic kind, and leave much else aside. But using this yardstick, here is one, large, and entirely comprehensive system which compares favourably with the older, selective model.

Table 5 shows, too, that compared the selective system, comprehensives concentrated not only more of their entries, but (judging by entry-passes) more of their ablest candidates, into rather than GCE exams. Again differences within school types are striking. In all subject-entries in comprehensive instances, the proportion entered for rather than for GCE varied from 84 per cent and 57 per cent; among secondary modern schools, between 99 per cent and 49 per cent.

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## TALKBACK



**College democracy**  
I. K. Wymer

All major colleges of further education now have governing bodies and academic boards. Staff and student representation varies with local authority interpretation, but the opportunity for involvement in decision-making is there.

Whether this has led to real participation depends on how far the element of democracy has percolated downwards to the organization of departments and sections. Although staff and students have the machinery for exerting pressure, experience suggests that using it effectively is the exception rather than the rule. Smooth progress towards democratic control relates to the outlook of principals, and the support for change they get from their senior staff, particularly heads of departments.

Despite some democratization in recent years, many departments are still run in a manner which would be regarded as unacceptable in other occupations. Initially many departments were small enough for consultation and communication to take place easily and informally over coffee. But many heads who started with five or six staff found themselves with 40 or 50—as many as in some secondary schools. It is inevitable that some begin to feel they are not involved in the kind envisaged. A great deal of information does not reach them, mainly because there is no adequate consultative machinery.

Senior staff did not have their positions undermined in the way some expected. On the other hand, they, too, had to explain their attitudes and methods. We all found it impossible to get away with arbitrary decisions. Frank and open comment was encouraged, with the consequence that a great deal of information became available during discussion.

A much larger proportion of staff than is normal became involved in developments. An increasing number were prepared to do preparatory work because they saw colleagues' proposals implemented after committee support.

This is vital in any committee work: one man, one vote does not automatically mean equal influence. An individual's influence is directly related to his efforts in preparing papers and arguing a case. The provision of opportunity for initiatives and the satisfaction resulting from achievements argue strongly for an open democratic committee system.

After a year, the constitution was amended to provide for all part-time staff and three students to be full members of the main departmental committee, with powers of co-option to enable other students to receive serious advice reports on his academic work. My experience working with students on committees convinced me that they must become much more involved in curriculum development and other general policy-decisions.

I. K. Wymer is principal of Bilston Sixth Form Centre, Wolverhampton.

Staff become disgruntled not because they do not make decisions, but because they do not know what the decisions are, or the grounds on which they are taken. It is easy for a head to assume information is common knowledge, when it is available to nobody but himself. Staff meetings with a monologue three times a year are no solution.

From 1968 to 1975 I was head of a department which grew from 14 to 46 full-time staff, and from four to 42 part-timers. Two months after I was appointed I suggested a democratic committee structure. Six sub-committees covering the main areas of work were elected to make recommendations to the main departmental meeting, the executive body. The constitution was similar to that of any organization run democratically, with all policy decisions to be taken by simple majority vote.

Most staff were prepared to give their views on the objectives that committees "waste time" and "rubber stamp", some senior colleagues were apprehensive that their authority would be undermined. Some pointed out that a head of department's contractual position means that he, alone, is responsible, and might be in difficulty if his staff took policy decisions he was unable to support. It was therefore written into the constitution that the head of department would be chairman of the main committee, but all other offices, including chairmen and secretaries of sub-committees, would be elected.

Over eight years there was no crisis of the kind envisaged, although it was necessary to spend a great deal of time presenting information and debating policies. Senior staff did not have their

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All major colleges of further education now have governing bodies and academic boards. Staff and student representation varies with local authority interpretation, but the opportunity for involvement in decision-making is there.

Whether this has led to real participation depends on how far the element of democracy has percolated downwards to the organization of departments and sections. Although staff and students have the machinery for exerting pressure, experience suggests that using it effectively is the exception rather than the rule. Smooth progress towards democratic control relates to the outlook of principals, and the support for change they get from their senior staff, particularly heads of departments.

Despite some democratization in recent years, many departments are still run in a manner which would be regarded as unacceptable in other occupations. Initially many departments were small enough for consultation and communication to take place easily and informally over coffee. But many heads who started with five or six staff found themselves with 40 or 50—as many as in some secondary schools. It is inevitable that some begin to feel they are not involved in the kind envisaged. A great deal of information does not reach them, mainly because there is no adequate consultative machinery.

Senior staff did not have their positions undermined in the way some expected. On the other hand, they, too, had to explain their attitudes and methods. We all found it impossible to get away with arbitrary decisions. Frank and open comment was encouraged, with the consequence that a great deal of information became available during discussion.

A much larger proportion of staff than is normal became involved in developments. An increasing number were prepared to do preparatory work because they saw colleagues' proposals implemented after committee support.

This is vital in any committee work: one man, one vote does not automatically mean equal influence. An individual's influence is directly related to his efforts in preparing papers and arguing a case. The provision of opportunity for initiatives and the satisfaction resulting from achievements argue strongly for an open democratic committee system.

After a year, the constitution was amended to provide for all part-time staff and three students to be full members of the main departmental committee, with powers of co-option to enable other students to receive serious advice reports on his academic work. My experience working with students on committees convinced me that they must become much more involved in curriculum development and other general policy-decisions.

I. K. Wymer is principal of Bilston Sixth Form Centre, Wolverhampton.

Staff become disgruntled not because they do not make decisions, but because they do not know what the decisions are, or the grounds on which they are taken. It is easy for a head to assume information is common knowledge, when it is available to nobody but himself. Staff meetings with a monologue three times a year are no solution.

From 1968 to 1975 I was head of a department which grew from 14 to 46 full-time staff, and from four to 42 part-timers. Two months after I was appointed I suggested a democratic committee structure. Six sub-committees covering the main areas of work were elected to make recommendations to the main departmental meeting, the executive body. The constitution was similar to that of any organization run democratically, with all policy decisions to be taken by simple majority vote.

Most staff were prepared to give their views on the objectives that committees "waste time" and "rubber stamp", some senior colleagues were apprehensive that their authority would be undermined. Some pointed out that a head of department's contractual position means that he, alone, is responsible, and might be in difficulty if his staff took policy decisions he was unable to support. It was therefore written into the constitution that the head of department would be chairman of the main committee, but all other offices, including chairmen and secretaries of sub-committees, would be elected.

Over eight years there was no crisis of the kind envisaged, although it was necessary to spend a great deal of time presenting information and debating policies. Senior staff did not have their

## A new monthly information column

14, and is looking for teachers interested in testing the materials and taking part in evaluation. Write to the Faculty of Educational Studies, Walton Hall, Milton Keynes, MK7 6AA.

The Rutland Strategy Education Committee, a group made up of teachers, planners, and representatives of local organizations, was formed two years ago to discuss and coordinate information about local planning issues, and to develop resources for project work in local schools. They have produced a Register of Rutland Resources, a Rutland Social Survey, relating to transport and conservation, and a "strategy kit", Rutland 2000. For information about the committee or materials, write to Bryan Waites, School of Humanities, Leicester Polytechnic, Scrymgeour Campus, Leicester LE1 7SU.

A Sussex secondary school is planning to involve second year pupils in community work with playgroups, pensioners' clubs, anti-litter projects, etc, and would welcome advice from other schools which have moved into this area. Information to Patricia M. Sadler, Priory School, Mountfield Road, Lewes, Sussex.

Two well-established teacher-produced magazines have just added their voices to the Great Debate. Teaching London Kids 9 (30p including postage from 79 Ronalds Road, London W5) has articles on standards, accountability and assessment, while Teachers Action 2 (35p including postage from 2 Turquand Street, London SE17) covers questions of curriculum control, mixed-ability teaching, and innovation in further education.

Alan Harris at the Open University is producing a course in mural education for use with pupils over

The April issue of the Audio-Visual Language Journal will be devoted to "Modern Languages in the Sixth Form", with articles on audio-visual and intensive methods, the N and F research programme, new courses and materials, and the changing sixth form. Copies for non-members £2, available post free from D. W. Coleman, 33 The Larum Beat, Yarm, Cleveland, TS15 9RH.

Two editors in search of authors. Paul Farmer (Mole Cottage, 100 Smart's Lane, Lougham, Essex) is putting together a book on pop music in education, and would like to hear from potential contributors who have been involved in the subject, whatever the level. Anthony Atwood (1 Wilfred Court, South Grove, London, N15) would similarly welcome a letter from anyone wanting to contribute to a book on teaching in urban secondary schools.

They have gone with the night. The monsters. The ghosts. It is morning. And time for school. The ghost has disappeared. I have made him invisible. But I can't make myself invisible. I am too big.

This poem, by Ernest Warner, aged 6, is taken from a selection of poems and illustrations by primary school children in Newham, intended to encourage other children and teachers to provide their own reading material. Published by Newham Language Reading Centre, Park School, Eleanor Road, Stratford, London, E15 4AB, 35p including postage; cheques to be made out to the centre.



Chinese Children in Derby  
Norman Eitchett

As part of his assignment for a diploma course on education in a multi-racial society, Norman Eitchett has been looking at the position of Chinese children in Derby. His pamphlet includes a lot of valuable information for teachers working with Chinese children. Available from the British Blackley, Bishop Lonsdale College of Education, Mickleover, Derby DE3 5GK, 45p including postage.

Handwritten text in a vertical box on the left margin.







# Beyond the birds and the bees

Jill Turner on abortion

**Abortion in Demand.** By Victoria Greenwood and Jack Young. Pluto Press, £1.65, 904383 11 3. Unwanted Pregnancy and Counselling. By Juliet Cheetham. Routledge and Kegan Paul £4.95, 7100 8499 4. What do you know about abortion? By J. M. Flinnis and C. W. A. Flynn. Oxford School Publications £1.65, 905297 00 6.

The heroines of *Abortion in Demand* are those who support the National Abortion Campaign in its demand for a woman's right to abortion at any stage of pregnancy. Only NAC, the authors suggest, clearly sees free abortion as an essential part of a woman's control over her own life. The reformers, one is led to believe, get in the way of progress by suggesting that abortion is a service for those on the margins of society and not something a normal woman, or they themselves, would ever use.

This argument falls down on a personal level. Diana Munday, one of the most diligent campaigners for the 1967 Act, became involved in the cause as a result of the humiliation and difficulties she suffered in seeking an abortion. Madeleine Simms has herself moved on to be one of the most convincing advocates of abortion on demand, and so has Keith Hindell her co-campaigner and co-author of *Abortion Law Reformed*, the history of the campaign that led to the 1967 Act. Indeed, Greenwood and Young sometimes quote Madeleine Simms' restricted vision and sometimes in support of their radical line. The authors draw an interesting distinction between birth control

and population control. They support the former but not the latter. Birth control is part of feminism and socialism; population control is neo-Malthusianism. While birth control decisions are taken by individuals, population control is the concern of an élite of experts anxious to promote economic development.

Throughout, the authors' libertarian standpoint of Marxist alienation, of the individual versus the State, never a State made up of individuals and affected by their actions, and the abstract antics of the Select Committee on Abortion, resulting in William Boyson's Bill, have lent support to that depressing view.

"Of necessity, reformism takes progressive demands, and pegs them to the needs of the system," say Greenwood and Young. But rightly or wrongly, it was the reformists, not the revolutionaries, who gave reformists have done invaluable work in defending the Act against the ravages of the Select Committee. We have the National Abortion Campaign to thank for showing us ready to take matters into their own hands, but ill-timed screams for abortion on demand at any stage of pregnancy do not help preserve the basic right in the 1967 Act.

Counselling plays little part in the scheme of things favoured by those who support abortion on demand. It is widely distrusted as the anti-abortionists' chance to build on the woman's feelings of guilt and to persuade her to have the baby. Unprejudiced counsellors, however, the more liberal a profession with its own ethical code. *Unwanted Pregnancy and Counselling* has little to offer specialists, but is a helpful introduction for teachers likely to

be faced with helping a confused and frightened girl.

An early chapter retraces well-trodden ground on women's role as mothers and workers in the belief that individual cases must be seen as part of a social pattern. Mrs Cheetham has nothing original to add and would have been well advised to have kept the book shorter and more specific. The central chapters, however, constitute a useful handbook for counsellors on the possible courses of action on the fore benefits, adoption and abortion procedures—and importantly—on contraception.

Mrs Cheetham was a member of the Lane Committee which produced *Abortion in 1974*. She is concerned not just with those for whom pregnancy means acute difficulties, but with the needs of those who view pregnancy with "considerable ambivalence because of the reordering of their lives which would entail... This is a liberal line" many would say that, if reordering of lives is the only difficulty, the pregnancy should continue and the mother accept the consequences of her action.

"You seldom do people realize, as Mrs Cheetham does, that 'wanting or not wanting is not the same or unqualified pleasure or dismay'. A woman sort out such mixtures of feelings so that she can make the decision she feels is right.

One minor point is annoying: Mrs Cheetham compounds the stigma of illegitimacy by fighting "unqualified" in the term which, meaning "unqualified", is accurate, in euphemism "natural". One thing counselling must surely try to be honest.

The drawings on the cover of *What do you know about abortion?* showing highly developed fetuses

in translucent fetal sacs, sets the tone of this work book and it is carried through to the final pages which bear two of the photos the anti-abortion organization LIFE uses most often, purporting to show aborted fetuses thrown out in a plastic sack.

The credibility of such photographs is suspect, and they carry no captions other than a quotation from the 1974 Lane Report saying that the gains facilitated by the 1967 Act have outweighed the disadvantages and, also contentiously, an uncredited statement that accepting abortion leads to the killing of children already born because they are defective, or a cause of overcrowding, or just unwanted and unwanted.

I have just heard a 13-year-old child telephone a radio advice programme and ring off quickly. She has just had a positive pregnancy test. "I don't know what I'd do with a baby," she said, "and I don't want to have an abortion and my friends and my Dad or my friends and I don't know what to do." Avoiding situations like that is what sex education is about: Flinnis and Flynn helping that? A girl in that situation would probably feel that the abortion on self-induced abortion where Flinnis and Flynn are thought not enough to list the methods they know not only to be useless but dangerous.

The book is evasive, confusing and sensational. Bold type highlights words like "mother" and "battered" when pregnancy is "injection" where abortion is the subject. The make-up is confusing, the illustrations poor, the captions misleading. It is a dangerous book that will twist, distort and upset. Better to turn from the birds and bees themselves than from Flinnis and Flynn.

# Connexion

Michael Church

**Culture and the Connexion.** John Reynolds and Michael Church. Open Books £1.25, 7291 11 3.

"This book is about the connexion is and ought to be in the forms of experience in schools and those who side them." Yes, this is indeed about that; the book is the foregoing sentence of a sophisticated and sophisticated author who does not let the serious theoretical or practical guides for others of a culture in process, the of the school, the approaches to redesigning culture—all are competent to an implicitly radical poet. If the authors' final flicker, not the flume (in E. A. Robinson's phrase)—for example, in his encouragement of Brian Patten.

In this godlike anthology (encouraging, as even the best editor must have, some loneliness, Roy Fuller's "Pennsylvania" worrying in "In Memoriam"

# Among this week's contributors:

William Cleghorn is at the Livingstone Institute of Development Studies, University of Edinburgh. Tracy Cline is an educationalist at the Woodberry Child Guidance Unit. Seamus Hegarty is a research officer at the NFER. Jill Turner is features editor of *Practitioner*. David Whitehead is at the Institute of Education, University of

# Winnowing for winners

Edward Neill on new poetry

**New Poems 1976-77: a P.E.N. Anthology of Contemporary Poetry.** Edited by Howard Sergeant. Hutchinson £3.50, 09 127990 9.

"This book is about the connexion is and ought to be in the forms of experience in schools and those who side them." Yes, this is indeed about that; the book is the foregoing sentence of a sophisticated and sophisticated author who does not let the serious theoretical or practical guides for others of a culture in process, the of the school, the approaches to redesigning culture—all are competent to an implicitly radical poet. If the authors' final flicker, not the flume (in E. A. Robinson's phrase)—for example, in his encouragement of Brian Patten.

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# Poet of the Rue Lepsius

Hilary Finch

**Cavafy's Alexandria.** By Edmund Keeley. Hogarth Press £7.95, 7012 0415 X.

Alexandria has drawn yet another writer into her web—this time she has caught a critic. The title of this latest study of Cavafy is suspiciously ambiguous: which will concern the author more, the poet or the city?

It was Keeley's aim to "trace the poet's aesthetic development and to delineate the expanding context of his central myth" through

pled with problems of arrangement and thinks that perhaps, finally, only a "loose-leaf folder" would have been satisfactory; but it will be used in an equivalent way in any case—for who reads anthologies consecutively?

Poems take time to sink in, but taking a few that catch the eye at once Ted Hughes seems in "A God" to be developing the method of *Grass* towards a kind of abstract expressionism. Peter Porter surfs along with "Piero di Cosimo on the Shoalhaven", D. J. Enright develops the argument that Evil had better start making good, while unknown Geoffrey Holloway's "Shugs" is very nice, or something ("... seem not to have the guts to mate/ yet deep grass/ finds them blue, oozy/ seem lifeless/ but for the way they cling/ like drying tur/ to anything that touches... / black armbands leeches/ stigmata/ inabilities..."); add S. T. Gardner's funny, Gravesian "First Time Abroad", Andrew Waterman's "From the Other Side", Wes Magee's "Boar Rite", Roy Fuller's "Pennsylvania" worrying in "In Memoriam"

Was not W. B. Yeats right when he said that if you had an interesting life, with luck your writing would no longer be a matter of literature at all? There are many more poems that at least look interesting, and certainly plenty of Names, if you like Names—Redgrove, Thwaites, Ewart, R. S. Thomas and so on. There are some obscure failures, and what a large deposit, still, from the sententious thirties.

the literal, the metaphorical, the sensual, the mythical city, into "The World of Hellenism" and "The Universal Perspective". It makes for pleasing, relaxing reading, and now and again the mind is nudged by a new gloss, a new connexion. But only now and again.

The categories are all too familiar, too many obvious truths (for instance, about the difference between the poet and the historian) are laboured, there is too much commentary and altogether too little that is new. And the chronological

stanzas ("140 years on"), Vernon Scannell meditating on old age and death, yet unable not to sound buoyant, almost gleeful.

Equally interesting, if problematic, were Roger Garfin Gardening in *Avernus* (obscurely), Charles Tomlinson ("To See a Heron") (syntax) and Elaine Feinstein's "Constantine" (shorten wedding of symbolism and realism). Bruce Dawe (Austral) records that "... over eager to leave some mark on the brute intractability of my city. I saw my teeth firmly clenched in the polyglot tread of someone's tyres, biting their way macademically/ over Princes Bridge (a pioneer!...)"

Was not W. B. Yeats right when he said that if you had an interesting life, with luck your writing would no longer be a matter of literature at all? There are many more poems that at least look interesting, and certainly plenty of Names, if you like Names—Redgrove, Thwaites, Ewart, R. S. Thomas and so on. There are some obscure failures, and what a large deposit, still, from the sententious thirties.

Paperbacks

# The dark side

Alistair Wisker

**Literature and Evil.** By Georges Bataille. Translated by Alistair Hamilton. Calder and Boyars £1.95, 7145 0346 0.

**Camus and Sartre: Crisis and Commitment.** By Germaine Brée, Calder and Boyars £2.50, 7145 1011 4.

**Kafka's Other Trial: The Letters to Felice.** By Elias Canetti. Translated by Christopher Middleton. Calder and Boyars £1.95, 7145 1136 6.

These three fascinating books concern writers and their commitments, and embody an examination of the relationship between literature and evil, life, and particularly childhood.

*Literature and Evil* consists of illuminating, original essays on Felice, by Elias Canetti, Michelot, Blake, Sauc, Proust, Kafka and Genet. Georges Bataille is committed to the belief that literature represents "a return to childhood... untrammelled by any restraint or convention" and expresses an acute form of evil which has a sovereign value "for us. Concentrating on unusual aspects of the work of these eight authors, Bataille produces a book which, as he says in his preface, is "strikingly coherent", full of rare insights and startling comparisons.

Sartre, says Germaine Brée in her study of crisis and commitment, is one of the last of the great system-builders. He affirms that man can control their future and should do so in terms of ends consciously defined. Camus, on the other hand, is one of those who laid aside the quest for a coherent intellectual order in the modern world in order to examine how best to live in it. "Politics is an art that deals in averages. Art is a man that deals in people." Quoting this remark by Lawrence Durrell, Professor Brée continues: "Camus, whether in art or politics, was a man who essentially dealt in people. Sartre, if I may venture the criticism, eventually dealt mainly in abstractions—which he confused with averages; and yet was deeply preoccupied with people." Thus identifying and distinguishing the commitments of these two great men, the author proceeds to examine their implications in the context of their work and the Camus-Sartre dialogue which she feels is still alive among us.

Kafka's letters to Felice Bauer, his fiancée, are absorbing and disquieting. They reveal so much of his personality, his loneliness, fears and constant conviction of his own frailty and of being under threat. They also illustrate how his "mode of life is devised solely for writing", as he says in one letter, and his commitment to his severe, lonely craft.

Elias Canetti writes in *Kafka's Other Trial*: "Certainly one feels difficult as one begins to penetrate the intimacy of these letters. But the letters themselves take one's diffidence away. For, while reading them, one realizes that a story like 'The Metamorphosis' is even more intimate than they are..." Through his sensitive analysis and appreciation of the self-revelation of unique fidelity contained in these letters, Canetti guides the reader to an understanding of the essential quality of Kafka's writing—its effortless intimacy.

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# What is violence?

Seamus Hegarty

**Violence.** Edited by Norman Tuttle. HMSO £1.15, H 23619 4. Talking About Violence. By Pat Laddy.

**Wayland** £2.25, 85340 293 0. The Social Context of Violent Behaviour: a social anthropological study in an Indian migrant town. By Emmanuel Marx. Routledge and Kegan Paul £1.50, 7100 8420 X.

It was a curious coincidence that brought these books to my desk at the same time as the BBC's recent revival after 30 years' obscurity of Charlie Chaplin's film *Monsieur Verdoux*. In the forties this film shocked and alienated cinema audiences who had previously idolized Chaplin. He forsook the role of the lovable tramp and presented—entertainingly and with delicious black humour—a very serious case about personal and group violence in society and the role played by Establishment institutions in fostering them.

We have an ambivalent attitude to violence in our society. Terrorists are condemned as long as they confine themselves to individual atrocities and are unsuccessful in attaining their broader aims. When—by dint of the cumulation of atrocities—they force us to the negotiating table they become respectable. As Chaplin's Monsieur Verdoux would have it, we punish the murderer who kills an individual and give medals to the soldier who massacres hundreds. At another level, the youngster who mugs a few people is considered an evil monster while the architect or town planner who makes life miserable for thousands—and unwittingly perhaps furthers the incidence of crime—is likely to collect an OBE.

This ambivalence pervades common-sense ideas about violence, as

well as the thinking of the various professionals directly concerned with violent behaviour. Until quite recently the main focus of attention has been on individual acts of aggression and property destruction, with little thought for the underlying causes, and their meaning in social and cultural terms. Pat Laddy's book is a case in point. Part of the Wayland Talking Point series, it presents in a stimulating and vivid way many examples of them. The format is uniform—a few pages, for each topic comprising an introductory paragraph, a selection of brief readings, and a few debating points, the whole enlivened by a photograph or other visual image. If particularly liked the eighteenth-century ducking chair—suspended over the village well, it was used to teach salutary lessons to nagging women.

The limitations of looking at isolated acts of violence becomes evident in the HMSO publication *Violence*. This book is the outcome of a series of seminars organized by a DISS working party. It draws together papers on many aspects of violence and, while the collection is not an integrated whole, it does imply a comprehensive framework and several of the individual papers are first-rate. I found the chapters by Colin Campbell outlining a conceptual framework, by Geoffrey Pearson on "defence of illegitimacy" and by Stuart Hall on violence and the media particularly rewarding.

The persistent emphasis is on violence as intelligible behaviour. People generally engage in violent acts for rational reasons and frequently as straightforward means towards ends. Consequently, blanket condemnation, and, especially, based

on it are wrong and do failure. Body-batters, for example, are not monstrous ogres, different from the rest of it is unwise as well as to treat them as such.

Marx's study in an Indian town was conducted against a kind of background and comes up with a certain of supporting evidence. The of violence in this town, munity of Moroccan town was low and consisted in domestic fighting, minor to property, coercion of and so on. The incidents could be seen as pure behaviour. The man beat wife is articulating for them the hopelessness of situation and the need to stoically a life of unendurable drudgery. A man who is asserting his personal and protesting at the alien which rob him of it.

This emphasis on violent viour as intelligible is to be comed. Understanding what act as they do, particularly their behaviour is out of the ary or threatening, is an prerequisite to practical. However, it would be a mistake to think that all violent behaviour be so explained. There is a dual core of irrationality—what we once called "original"—underlying many of our. People are not always good deed if we deny the occurrence. Does it make sense to being good? There is a dual the new orthodoxy that is to explain behaviour through thought inexplicable. It will reach itself and provide reasons for what is essentially

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26 Books/History/Children's Literature

# Kings and queens

Rosemary O'Day

Henry VIII. By David Fletcher. Wayland £3.25, KS340 430 5.  
James I. By David Waller. Wayland £2.95, KS340 427 5.  
The Tudors and Stuarts. Edited by William Lamont. Sussex Books £3.80, 905272 04 8, £1.85, 905272 05 6.

These latest volumes in the Wayland Kings and Queens series seek to present a brief account of the life and reign of the monarch concerned, presented chronologically, but topically and simply, and by a professional historian.

David Fletcher does not seem to have been acquainted with a good deal of the recent literature on Henry VIII or the English Reformation, and David Waller's account of the reign of James I is on occasion rather naive—as when he seeks to point to some of the origins of the Civil War. It could be lamented that both books are perpetuating rather than correcting the simplistic and old-fashioned views which many people share of these two monarchs.

While one does not expect (or want) every historical biography to be an academic monograph, one could yet wish fervently that some of the hard work done by scholars were getting through to the mass audience.

Although the studies are pro-

foundly illustrated, the reproductions are all in black and white, a medium which does little justice to many of the subjects—particularly in the Henry VIII volume.

The idea on which *The Tudors and Stuarts* is based is perhaps one of the most innovative to come out of our universities in many years. I do not think many modern historians who are involved with teaching the subject would disagree with that "the gap between the authoritarianism of history teaching in the classroom and the authoritarian, contingent nature of the historian's craft—as professionals such as Bluch, Carr, Collingwood and Elton have defined it—seems at times impossible to bridge. How do we transmit the uncertainties of the historian's findings to students who have been conditioned to history as the memorized study of certainties?"

I recall being at university with highly intelligent people who, after three years of studying a history course which emphasized the contingent nature of history writing and focused on controversy, still regarded history as something which could be easily encompassed in a date chart.

Obviously there are dangers in swinging the pendulum too far the other way, but on the whole William Lamont's aim in producing these conversations between contemporary historians on controversial issues in early modern England is

laudable. It would be the first person to say that this is not a textbook. Unfortunately, the brilliant idea does not quite come off in practice and this may be attributed to a variety of factors. First, the book is based on the natural in speech appears stilted and contrived in print on occasion. Secondly, only one of the historians chosen to speak is a natural conversationalist—Elton (oddly enough his highly controversial *England Under the Tudors* seems to be accepted as gospel by sixth formers throughout the country who use it as a textbook in A level classes).

For the most part the discussions are unexciting except to the committed (for whom the book is presumably not intended). For example, in the discussion between the Aylmer and William Lamont on the issue of the Eleven Years Tyranny we find two eminent historians politely agreeing with one another for the most part in their reaction against the accepted interpretation of the personal rule of Charles I, when things promise to get interesting the issue upon which the historians disagreed (the role of Laud and the Arminians) is quickly dropped. Thirdly—and probably arising from this second point—the discussions are so brief that disagreements cannot be explored fully or satisfactorily.

To a great extent the defects of the book (and the tapes) will be readily remedied in the tutorial room. The discussions were never meant to stand on their own as an introduction to the period or as the contrived essays ranging. One would hope that the student knew something about the period before he or she read the book and, even more, that he would feel the desire to read on afterwards and arrive at his own view of this important episode in the early seventeenth century.

It is a pity that the discussions were not more superficially exciting (which would not mean sacrificing academic standards surely); one would hope to convert the unconverted rather than simply to preach to the established congregation.

# Improving tales

Peter Fanning

*Herman the Helper*. By Robert Kraus. Pictures by Jose Aruego and Ariane Dewey. Kestrel Books £2.25, 7226 5296 8.  
*The Magnificent Uniform*. By Sally Cedar. Pictures by Rita van Bilsen. Macdonald and Jones £2.95, 354 08007 5.

*The Green Bronze Bell*. By Offred Hoising. Illustrated by Herbert Hamish Hamilton £2.75, 241 89543 X.  
*The Holybys*. Told and illustrated by Simon Stead. Illustrated by Methuen £1.60, 416 85020 0.

Every story points to a moral—some more pointedly than others. Improving tales in the course of the last ghastly era for naughty children who told lies or did not do as they were told.

Well, "plus ça change"—a lot of the ghostliness has gone, but the moral tone rings loud and clear in *Herman the Helper*, a baby who, an aquatic with busily doing good. He is the joker in the jungle warfare at the bottom of the ocean. Whether helping his father to capture little sprats or rescuing fishes from the sea turtles, like crumby sponge cakes, there is never a dull moment. Idiotic activities like putting ships in bottles or loading old trolleys with balloons keep the story well away from the danger of dry sermons. And the bright water colour illustrations are an endless delight. Enthusiastic cries of "Lorray for Herman" have a strangely non-emotive quality.

*The Magnificent Uniform* illustrates what happens when people get carried away with sounds of life and drum. The magnificent king leads a Jekyll and Hyde existence and when he wears his uniform he becomes transformed into a roaring lion. But of course they all live happily ever after. The Blacksmith's daughter, the King's uniform, him how nice he is, free from the authoritarian caper. It all ends up with a pyjama party—rather a curious turn of events.

The pictures do not directly with the text, also much less fierce than wooden dolls, bathed in blue, but liked the pacific green of the garden—not simply because one of the guards with interest at a stage.

But kings and emperors corruptible as the new *Green Bronze Bell* tells. Ivan tried to remove the bronze bell, which he found while ploughing in a village. Here again the cruel tone has to be carefully peddled. Even so, the mystic quality of the legend; the suffering tyrannical Tsar and a kind, moral justice in the end, the tales are exquisite—rich with a Byzantine effect. Sutherland's tapestries at Cathedral.

The story of *The Holybys* been toned down as well. It is vividly struggling, the early reader to find out the story. The book is published by Dog Told. "Little Dog" is so lovely. (In the morning cut off his tail and thoroughly enjoyed it.) In Simon Stead's version, in Simon Stead's version, the Old Man and Woman of the Turnip House. Pretty staff by comparison.

My friend, the Holybys, they have sorted out the moral. They are no longer carried through the long grass, get gobbled up in the end, but there are plenty of the needs made of real words. There's still enough of the quality to keep a light awake at night, ever alert. Gentle bump and the moral of *Holybys*. Moral: from muzzling your dog, get something worse than a less night.

# Economists' aids

David Whitehead

The O level economics textbook market is saturated; at least 16 brands are competing for the teachers' contracting resources. There is little product differentiation, and no comparative surveys are available. The teaching economics industry is also well stocked with dictionaries of economics—the "crammer" type of textbook and study guides and workbooks. Originally, rarely looking in this field. For those who prefer the new approaches and materials, the book by Boswell (reviewed below) is recommended. The rest will help students pass examinations, but they are not calculated to inspire, and in some cases, may well fail to motivate.

*Economic Society*, by K. B. Marler and L. P. Alderson (Oxford University Press, £1.50, 119 913125 2) is a standard O level textbook fairly well presented, with a large number of diagrams and tables. But the usual distortions arising from oversimplification appear; for example, the authors write that "in theory, there must be for every country a population size that is just right in relation to its resources." This also affects the fate of all applied economics textbooks of being out of date when it goes to press: the most recent figure given for unemployment is around 400,000 at the end of 1973. Pupils will find the *British Economy Survey* also published by OUP, to brief themselves on more recent developments. Each chapter ends, rather unimaginatively, with sample examination questions.

*Descriptive Economics* (fifth edition), by D. Harbury (Pitman £2.50, 273 00270 8) is a revision of a popular O level textbook contains extensive revisions, and the printing and layout has been improved. Although the general emphasis remains on descriptive economics, an attempt has been made to relate some key economic concepts to subjects such as retailing and balance of payments. The questions at the end of each chapter are one of the best features of a book which provides accurately made to relate some key economic concepts to subjects such as retailing and balance of payments. The questions at the end of each chapter are one of the best features of a book which provides accurately made to relate some key economic concepts to subjects such as retailing and balance of payments.

*Elementary Economics Workbook*, by J. Harvey (Macmillan, Pupils' book, £1.50, 333 19281 8. Teachers' book, £1.50, 333 19315 6). This companion volume to Jack Harvey's *Elementary Economics* includes multiple choice questions on the text, practical projects, points to discuss and past examination questions. The teachers' edition simply adds the answers.

*Visual Economics*, by John L. Garrett (second revised edition) Evans 30p, 237 2186 X) would serve as an excellent introduction to the text, practical projects, points to discuss and past examination questions. The teachers' edition simply adds the answers.

*Britain's Agricultural Industry*, by Brian Hill (Heinemann Educational 80p, 435 84565 9) is the twenty-second book in the excellent "Studies in the British Economy" series and will be valuable for both economics and agricultural economics courses. Chapter one deals with rural population and the effects of various agricultural methods on countryside full of butterflies, fish-filled rivers and farm ponds. The next chapter sketches the history of farming in Britain.

The text proceeds to apply standard micro-economic theory to agriculture and the traces of Roman box hedge beds at Fishbourne. There are a few naive comments, as in the section on Celtic Law: "But there were several reasons why you could not expiate merely them were murder, arson, and theft of cattle! This last one is interesting as it does not seem nearly so serious as the other two." The section on rural life in the Victorian and middle school libraries. The Roman period and Medieval England, are particularly well covered. A mixture of sepia coloured photographs and contemporary sketches and plans, and will be useful for Junior and middle school libraries. The Roman period and Medieval England, are particularly well covered. A mixture of sepia coloured photographs and contemporary sketches and plans, and will be useful for Junior and middle school libraries.

*2,000 Years of British Life*. By Plantagenet Somerset Fry. Collins £4.95, 00 106172 0. Packing 2,000 years into 250 pages inevitably presents problems, but this is a most attractive book with a mixture of sepia coloured photographs and contemporary sketches and plans, and will be useful for Junior and middle school libraries. The Roman period and Medieval England, are particularly well covered. A mixture of sepia coloured photographs and contemporary sketches and plans, and will be useful for Junior and middle school libraries.

culural producer markets; the case study material here would enrich any micro course. Comparative costs and price and income elasticities are well covered as is the vexed question of farmers' incomes. This leads on to government intervention, and the role of the EEC common agricultural policy. There are a few examination questions, some suggestions for further reading, and a simple index.

*Economics of the Market*, by Gordon Hewitt (Fontana £1.95, 00 633183 1). This micro-economics textbook is intended for the A level and first-year college market, although certain sections are more advanced (some of the welfare economics used often appears in more advanced university courses). The study is reminiscent of Stonier and Hague in its approach, although it is also more up-to-date with numerical examples and the author introduces games theory to help explain oligopolistic behaviour. Unlike Nevins' similar text there are no worked examples, and the index is disappointingly unanalytical for such a complex book.

*Social and Business Enterprises*, by J. S. Boswell (Allen and Unwin £4.95, 04 338078 6, £2.95, 04 338079 4). The advanced undergraduate taking a social science degree will find this book most useful. However, as the treatment is fairly simple and non-mathematical, it would also provide good background reading for the able sixth form student on such topics as "The Social Thesis" and marginal cost pricing.

The first part of the book defines organizational economics and distinguishes between the allocation systems of business, public and voluntary enterprises. It analyses the economic approach to decision-making and the logic of choice as applied to organizations. The central core outlines the practical uses of four main groups of economic cost: time, risk and uncertainty; and the theme of size and efficiency. Various problems are discussed, for example profit policies, problems of market knowledge, and big business budgeting and planning systems. Finally, the allocation of resources to social enterprises is considered, and the application of cost-benefit analysis.

This well-written text is a forerunner of applied economics material, in the shape of extended examples and case studies, and will be useful for some more advanced college economics courses, and for most business studies courses. *Basic Economics: A Dictionary of Terms, Concepts and Ideas* by Tim Congdon and D. McWilliams (Arrow CSE monograph 13020 3).

The authors of this dictionary admit that their attempt to convey meanings in simple language may, at times, have resulted in infidelity to scientifically recognized definitions. But surely there is no excuse for implying that shares represent a loan to a company, or that economies of scale are reductions in the average cost of production as the level of output increases (with-out mentioning the long run). Still, this reference book is useful in being right up to date, containing, for example, a simple exposition of the meaning of the "New Cambridge School".

*A Dictionary of Economics and Commerce*, edited by S. E. Stedler and G. Thomas (Pan £1.50 330 24552 X) with its 11 contributors, represents much better value for money than *Basic Economics*. Although one could quibble about the accuracy of certain definitions, it is almost twice as many closely printed pages.

The studies, plans, pictures, photographs and models of London through the ages are particularly interesting. Anthony Locke

# From micro to macro

Geoffrey Wood

An Introduction to National Income Analysis (second edition). By Wilfred Beckerman. Weidenfeld and Nicolson £5.50, 297 77060 8, £4.00, 297 77059 4.  
Intermediate Economics (third edition). By J. Harvey. Macmillan £2.95, 333 19605 8.  
Introductory Economics (third edition). By G. F. Stunlake. Longman £1.75, 582 33050 5.  
Contemporary Economics. By Howard Sutton. Martin Robertson £5.95, 275 85200 2.  
The U.K. Economy. A Manual of Applied Economics (sixth edition). Edited by A. R. Prest and D. J. Coppock. Weidenfeld and Nicolson £6.50, 297 77231 9, £3.65, 77231 7.  
Britain's Economic Problem: Ten Few Producers. By Robert Bacon and Walter Ellis. Macmillan £6.95, 333 19728 3, £1.95, 333 19727 0.

Beckerman's study of national income analysis is excellent, though limited in its coverage; it deals only with macroeconomics. The links between the national income accounts and economic theory are made much more explicit than is usual. Chapters seven and 10 on income distribution and on the meaning of a "change" in national product, are particularly good. It later shows, in a way unusual even in more advanced texts, that micro-economic theory is the basis of macroeconomics. Although intended primarily as an introductory university text, it could certainly be used in schools, where only chapter analysis) would probably prove too difficult.

Stunlake's book is both readable and accurate. Economics is always related to the "real world", and where modern developments in theory relate directly to policy, they have been incorporated. It can be recommended for use in schools; the occasional fudging of issues (probably inevitable at this level of simplicity) can soon be dealt with by the teacher. It would also serve very well as the basis of an introductory course at further education institutions. Sutton's *Contemporary Economics*, the only first edition among

these four textbooks, is aimed at the university market. It is unlikely to establish itself in this country, for its only advantage over its leading competitors (apart from a small price difference) is its unusually thorough testing of the theories it expounds against the data, and all the data is from the United States. The book is, however, clearly written and sensibly organized, and could well find its place in school libraries, so that sixth formers could see how the theories they are studying stand up abroad.

Finally come two texts complementary to a main course book. Prest and Coppock is excellent, and would be very useful in schools. Each chapter provides much useful information and displays an admirable blend of analysis and well-used statistics. Bacon and Ellis expound at length the diagnosis of the ills of the United Kingdom economy that they first set out in *The Sunday Times*.

The analysis undoubtedly requires more knowledge of economics than an A level provides, although it will be useful for reference. Sixth formers will be forced to think by some of the facts Bacon and Ellis marshal—for example, that between 1965 and 1973 administrative staff in national health hospitals increased by 51 per cent while the number of beds occupied each day fell—and they will undoubtedly get the flavour of economics as a still expanding subject with a major bearing on everyday life.

All these books, then, have something to offer; if I had to recommend only one, it would be Stunlake's, for, taking account of price (as every economist must) it undoubtedly represents the best value.

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# East Anglia

Nature in Norfolk: a Heritage in Trust. Preface by Sir Peter Scott. Jarrold £3.60.

Forget about the rather obsequious nods in the direction of the great and the good at the beginning of this book: it is a mine of fascinating information about the peculiar mixture of animal, vegetable and human that has made the northern part of East Anglia. I should have liked more aerial photographs and a bit more on the peculiar atmospheric conditions that you sometimes get in that part of the world. But even with something as good as this, you cannot have everything.

# Travels on horseback

Travels in France and Italy by Arthur Young (£4.95, 460 00720 3). I venture to offer my itinerary to the public just as it was written for the spot. It is a travelogue through Boudonville, Boulogne through Bordenau, Poitiers, Paris to Nice, Venice and Florence, Arthur Young kept a lively account of his journeys during the years 1787-9, just before the French Revolution.

Everyman/Dent-Dutton has recently reissued these *Travels* and it is good to have the chance to read again the observations and thoughts of a man who mixed with high society at Versailles, was disappointed that Venice did not come up to Cardenio's depictions, and who considered Paris "a wazy infernal London"—partly from the bidders, that is. His essay "On the Revolution in France" is included at the end of this volume.

# Age of patrons

Katya Watter

The Baroque Age in England. By Judith Hook. Thames and Hudson £8.50, 500 23229 6.

In this excellent book Dr Hook examines in an easy, yet controlled style, the concept of Baroque in general and in England in particular. The study is concerned mainly with architecture and painting but, faithful to the title, she relates these to the total culture of the age and society that nurtured it. Her knowledge and understanding of the seventeenth century enables her to give a comprehensive and instructive account of the reasons for the growth and decline of what many people consider an art form alien to the English spirit and to show that this is an erroneous view.

In her introductory chapter Dr Hook includes ideas on what Baroque was designed to achieve—the question "what is Baroque?" In the body of the book these questions are treated more extensively. She also discusses the origins of Baroque; its political framework; the important role played by its patrons and the sort were (the baroque age has been called "the age of patrons"); its essential size and richness; its no single aspects was conceived in total experience involving the whole of people and consequently, other arts and sciences. It is a book which will help to fill the gap of the "Age of Patrons" in the history of the English Baroque, and its function as a source of prestige

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whether for an individual or corporate body. The heyday of English Baroque, according to Dr Hood is as she says, some would prefer starting point is with the later Stuarts & Tories. With the end of the dynasty and the assumed political power by the Whig fallacious influence of the past and the century was established and became a in the period of the eight century known as "The Reason" when the exuberant sensuous appeal of Baroque art was despised. Dr Hood draws on the experience of the great and painters, stone and wood and builders of the time and such details as where their materials and their were organized. She also of the often exasperating and crippling problem of where how they obtained the vast of money needed for their schemes.

In the concluding English Baroque, came throughout to be a style in from the period that gave it. It is seen declining in political and intellectual of the eighteenth century. There are 65 black and white illustrations (one which has been possible to reproduce paintings in the colour that as important a role as the of the buildings they show and how the eighteenth century buildings in England, as a selected bibliography and as

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# Opening doors and minds in the halls of history

Gillian Thomas reports on plans for Heritage Education Year

Over 200 historic houses throughout the British Isles will open their doors—free to teachers on Saturday, April 30 from 10.30 to 12.30 as part of Heritage Education Year. As well as being able to take a good look round, they will be able to talk to the owners and curators about the educational resources each house offers.

What projects might their children be able to carry out there? What would these involve in the way of extra facilities? What is the house's speciality and how could this be exploited as teaching material?

The teachers will be urged to thrust out questions like these—in addition to checking on more mundane requirements such as car parks and toilets.

The Department of the Environment, which is responsible for 750 buildings and sites open to the public, will admit teachers free to the Tower of London film showings and will present special film material to them. There is also to be a seminar for them at Fountains Abbey in Yorkshire. The department has just appointed its first education officer, Alison Heath.

It was because historic houses are so rich in educational material that Heritage Education Year was initiated by the Historic Houses Association who are financing it, with some outside donations.

It is also backed by the National Trust and the National Trust for Scotland, which is working closely with several Scottish education authorities and has produced a number of teaching aids at various historic houses and sites. In addition

it is using prize money worth 20,000 German marks (approximately £5,000) for educational projects. The money came from the Europa Prize it won during Architectural Heritage Year 1975 for its "Little Houses Improvement Scheme".

To introduce Heritage Education Year every school in the country is being provided with a broadsheet (through its local authority) by John Hodgson, Curator of Sudbury Hall, Derbyshire, who is Director of the Year.

This includes details of a competition for teachers. They have to formulate in 300 words a set of general principles for successful educational visits to historic sites. The closing date is April 30, with a first prize of £50. It is hoped that the results will help to provide concrete guidelines for owners to put into practice as the Year goes on.

There are also various competitions for children of all ages. For scoring one for the best drawing, painting, poem, essay or story about one of its properties, the National Trust for Scotland is offering prizes for a scrapbook and wall-chart.

The Automobile Association is inviting children under 16 to write a five-minute play on one of the houses, while the Puffin Club has a "Design Your Own Puffin" competition. In addition many individual houses will be running one of their own.

One of the most striking events—a completely new concept in the presentation of history to children—

will be a dramatized reconstruction of a seventeenth century household under siege. This will be at Doddington Hall in Lincolnshire between May 16 and 22. Visitors will not only be able to eavesdrop on costumed discussions about civil war tactics, but also see seventeenth century recipes being cooked and pick real herbs from the garden to make seventeenth century prescriptions.

In the dairy, milk will be churned into butter and cream cheese. A special set of project leaflets is already available.

Teachers and pupils from 10 local schools are taking part in a Jubilee pageant at Rockingham Castle, Market Harborough, in July. It will depict the castle's history from the time of William the Conqueror up to the present day.

The flight of Charles II from Moseley Old Hall in Staffordshire is being re-enacted there and as the many similar projects will be announced.

It's up to teachers to say what they would like done in their particular areas," stresses John Hodgson. "That's really what the Year is all about."

In May he is himself hosting a seminar for National Trust administrators on "Providing facilities for children at country houses". It will be held at Sudbury Hall which is one of the few houses which already has a comprehensive educational programme.

In addition to all these activities, which will continue right through to October, another feature of the Year will be Heritage camps for



Above left: Acorn campers laying turf at Montacute House; right: Craigievar Castle, Aberdeenshire.

children. They are being organized by the National Trust, some in conjunction with Colony Holidays, and in addition to its Acorn camps for conservation projects which have been running since 1967 for over-16s.

Three project books on historic houses, one for teachers and two for children, are being published during the year.

The Department of the Environment has produced a new 30-minute film, "Building the Tower of London", while new to the National Trust film library is "Voices from the Past", an intriguing 20-minute ghost story depicting children at Sudbury Hall in the eighteenth and nineteenth centuries.

One of the members of the steering group for the Year is Lord Monagu de Beaulieu, President of the Historic Houses Association. Launching the Year he said: "We see our homes as centres of education which can reflect the past and social history of the nation as well as its art, farming and countryside."

By stimulating closer contact between historic houses and local authorities we hope to provide visual aids as a large on-going proposition."

For further details of Heritage Education Year, send an A4 stamped envelope to the Director, H.E.Y., Sudbury Hall, Derbyshire or Michael Beaumont at the National Trust, 42 Queen Anne's Gate, London SW1; or M. P. Blackie at the National Trust for Scotland, 5 Charlotte Square, Edinburgh EH2; or Alison Heath at the Department of the Environment, 10 Marsham Street, London, SW1. Teachers wishing to attend the Open Day should inform the house or camp by April 23.

# Educational equipment review

## Fast and accurate

JOHN LEWIS on scientific measuring instruments

The old adage that "if it moves, it's biology, if it stinks, it's chemistry and if it doesn't work, it's physics" is becoming more blurred as a workable definition. With the advent of the sophisticated apparatus demanded by new courses in science, the biologists and chemists have now started to catch up with the physicists in terms of equipment.

A good example is the study of the environment, which has led to a need to measure quickly and accurately the parameters of oxygen content, pH value, sound and light intensities as well as temperature. Both WPA and Unilab produce modular kits housed in attractive briefcases to satisfy this demand. They can be used either in the laboratory or in the field.

An oxygen meter can be used to measure the dissolved oxygen content of water: in streams, for example, this is a measure of the pollution level: in a sample of air it is the amount of oxygen. The meter produced by Philip Harris only works for aqueous solutions and not gases. The biologist will find this one quite useful, as the biochemical oxygen demand can be measured directly, as well as the oxygen concentration of expelled air. Readings are shown on a meter which is graduated in percentages of oxygen. There is little difficulty in calibrating this instrument, since atmospheric air has a concentration of 21 per cent oxygen.

There is no need to reserve these thermometers for field use only as they can often be used to advantage in the laboratory, where the whole class can see the meter dial and have a go.

Weir produce a temperature probe and dial for their well-known class demonstration instruments. By measuring the optical transmission of a solution at a given wavelength, various experiments in concentration determinations and reaction kinetics can be carried out. The instrument to use is a colorimeter, which shows the amount of transmission, or absorbance, on a meter. Before use, the colorimeter needs to be calibrated, using a reagent blank in an identical cuvette to that in which the test solution is contained. Philip Harris have opted for a system whereby the two cuvettes are easily interchanged in the light path using a sliding carriage. WPA and Griffin, on the other hand, make the user actively interchange the cuvettes manually.

Whereas the measurements in a colorimeter are done at a particular wavelength of light, a spectrophotometer records the transmission of light through the solution for all

visible wavelengths. This is done by rotating a "rainbow" filter fitted in front of the light source and recording the amount of light being transmitted as shown on the meter dial. There are an arrangement in their equipment which allows the filter to be driven by a chart recorder which also plots the results.

WPA produce an exceptionally useful Memory Meter. This is a sensitive multi-range instrument with the added features of a memory and a clock. By choosing a time interval from one minute to one day, this memory meter will take, and remember, up to eight measurements. Thus if the interval is set to one hour, the meter will record the measurement at hourly intervals. This is ideal if an experiment is to be left overnight or even for a week.

One version of this clever device will switch on battery-powered apparatus just before the measurement is to be taken, and then turn it off again afterwards, just to save battery life.

Optical activity is another quantity which often needs to be measured, because certain solutions—

such as sugars—rotate the plane of plane polarized light. The apparatus consists of a light, a couple of polarizing filters between which can be placed the sample. The top polarizing filter is rotatable and fitted with a degree scale. Both Griffin and Philip Harris produce instruments, the former costing £30, the latter about £25. An accessory a Faraday coil can be fitted to the Griffin model which allows the effect of a magnetic field on the degree of optical rotation to be measured.

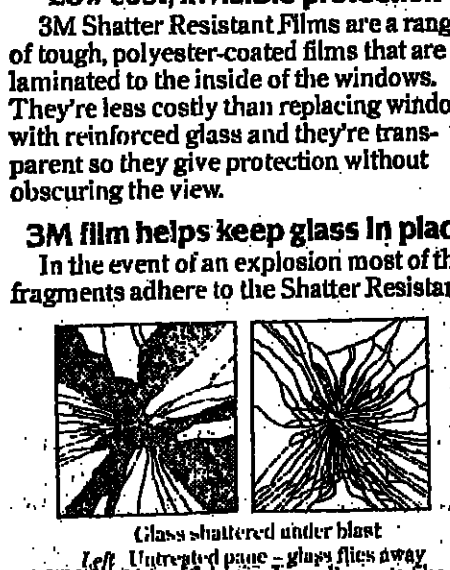
With the human body being so readily available it is not surprising that several experiments have been devised—subject to the necessary safety requirements—which make use of it. One of these involves recording human lung activity, and for this a Spirometer is used. The apparatus is filled with oxygen and the subject breathes this through a tube. A soda lime container is fitted so that carbon dioxide can be absorbed from the expired air.

In use, the float moves up and down as the subject breathes. Continued on next page



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Case history A 160lb. bomb exploded only 40 yards from the office of John Riddell and Son in Belfast. The bomb shattered the 3/4" plate glass but the fragments adhered to the 3M Shatter Resistant Film and nobody was injured. Before the glass could be replaced the office was bombed again, but the film still withstood the second attack.

# Finer aspects of anatomy

by Jackie Hardie

The Functions of the Body. Slide Folio of 18 slides, £3.50. The Muscles. Slide Folio of 12 slides, £2.60. The Slide Centre Ltd, 143 Chatham Road, London SW11 6SR.

The Slide Centre publish and distribute slide folios produced by the Rickitt Encyclopedia of Slides. Two recent folios deal with the anatomy of the human body: number 1057 contains 35mm cardboard-mounted slides on "The Functions of the Body"; number 1055 on "The Muscles".

Although the diagrams are clearly photographed, many of them are inaccurate or out of proportion, have wrong or misleading labels and some important features of the organ systems are omitted. For example, a section through the skin shows the usual structures such as hair follicle, sweat glands and dermis but it is the capillaries below the epidermis, not the nerves that are labelled with "sensory endings".

The head section shows the brain but important detail such as the meninges are not drawn, even though the pons (the connecting bridge between the two halves of the brain) is shown and labelled. The neck is shown on another slide and here the larynx label points misleadingly to a laryngeal cartilage.

The elementary tract (urinary) is brightly coloured and has a human background; the pit is wrongly positioned so that the stomach and liver are level with the seen in the diagram of the urinary tract, where the two arteries should be the same length as the kidneys. One kidney is longer. The tubes are shown in a sectioned longitudinal showing a labelled outer cortex but pointing medial.

The outside of the heart in another slide is a bright, light right side and red in side. Veins, aorta, pulmonary and aortic arteries are shown at the top of the heart, but there are no pulmonary veins.

# view; the relationship of the uterus and reproductive passages to the rectum is completely ignored and passage is not even drawn.

Set 1057 is for use in elementary studies; the twelve slides of "The Muscles"; set 1055, on the other hand, must be intended for use at a higher level, for the frames show the musculature of the human body in incredible detail. Each muscle is labelled with its proper name, as "quadratus lumbi superior" and the muscle that goes from the mouth to the lower lip.

It is the detail that is the fault, for the slides and go far beyond the demands of any ordinary and advanced level syllabus in the biological sciences. At these levels a knowledge of muscle action is needed, so an antagonistic arrangement of muscles and the functional relationships of muscles, tendons, ligaments and bone are points that should be emphasized in this type of material. However, these are completely overlooked by this folio set.

It is difficult to see how this could be incorporated into school lessons and the inaccuracies in other set 1057—mean its use not recommended.

Many drawings isolate the organ systems from the body. Orientation and judgment of their relative size and position is easy when these are "familiar organs" such as eyes and teeth, but much harder when internal organs such as those of the reproductive system are being dealt with. This is particularly evident in the drawing of the female reproductive system, where the sex organs are not only removed from the body but also drawn in side

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Continued from previous page.

down and a pen attached to this draws a trace on a kymograph placed adjacent to the sprinometer. A kymograph is a drum, covered with graph paper, which is rotated about a vertical axis by a variable speed motor. It is the biological version of a chart recorder. Today, however, various other functions have been added to it, such as the Griffin one which has a stimulator built in, making it ideal for experiments on nerve/muscle physiology.

Balances are among the best-known measuring instruments. Today they are invariably top pan balances and fall into two main types—electronic or mechanical. The former gives a direct digital read-out without the user having to do anything except place the object onto the pan, the latter a digital readout, but the user has to select the appropriate range and operate a vernier to obtain the final reading.

Precision depends to a certain extent on the weighing range offered. Up to about 200g it will be to 0.1g, while if the capacity is 1000g, the accuracy will be 0.1g. An analytical balance will give a precision to 0.0005g. Prices vary between makes, but are in the bracket £200 to £1000.

Pieces of apparatus which started life in the physics department, such as GM tubes and counters (which the chemists now use for their radioactivity experiments) or the digitizers the biologists have taken over for reaction timing are also relevant. Perhaps the most sophisticated piece of biological apparatus around is Griffin's "muscle measuring box" which holds not only the mouse but also a ruler.

Griffin and George Ltd, 285 Ealing Road, Wembley, HA0 1HJ. Philip Harris Ltd, Lynn Lane, Shenstone, Staffs WS14 0BE. Offord Ltd, 113 Lavender Hill, Tonbridge, Kent.

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# Freedom from distraction and noise

ANNA SPROULE looks at screens and partitions for school classrooms

The concept of the open-plan school seems finally to have died. Flexibility—the aim of the open-planners—still remains one of the key criteria in school design, but open-plan in the extreme type accepted as the answer. Many teachers, of course, hated it from the start.

The vogue, however, has left them with the unwelcome legacy of large, and in some cases vast, conjoined teaching spaces that make freedom from distraction and an atmosphere of security matters for wishful thinking only.

Primary teachers complain of the lack of wall space on which they can pin pupils' work; colleagues in the schools, struggling with the intricacies of team teaching, are made uneasy by their unwanted lack of privacy. And both can be brought to desolation by the noise level.

The answer is a simple one and many schools are now adopting it: partitioning of one sort or another allows for flexibility of use and improved working conditions. But there, given the staggering variety of choice offered on the partitions market, the simplicity stops. There are currently three main ways of dividing one bit of room space from another, and each of the three has lent itself to any number of variations.

Schools can, if they want something that is all but permanent, go for one of numerous types of rigid, folding systems, or demountable partitioning systems, or for its shoulder—headheight screens.

If they want something that can be altered from day to day, they can choose from among an equally large number of free-standing screens.

A middle way, that combines the sound-resistance of rigid partitioning and the screen's manoeuvrability, is the pull-across partition, featuring either a series of sliding or folding doors or—more usually—a continuous steel-cord "curtain" placed in concertina fashion. These are, surprisingly, much rarer than

either screens or demountable partitioning. Running them to earth is only one of the problems. Cost is another. As a rule, it is extremely difficult to give hard-and-fast cost per foot of the folding and sliding types available, since these are complicated by such factors as discounts, the degree of on-site construction and finishing work needed, and extra frame systems, for instance, have built-in soundproofing, while, with others, this is an addition. But, in all cases, floor-to-ceiling partitioning is a major outlay.

Gaugewood Partitions Ltd, for example, give three different prices per foot run for their rigid demountable partitions: supply only; supplied and erected; and supplied, erected and decorated. (Quantities larger or smaller than a 50-100 foot run, they add, may be different.) The figures for the tallest variety in their cheapest range are £10.30, £13 and £17.50 respectively.

The cost of folding partitions can go astronomically higher, but even free-standing screens do not come particularly cheap. Prices per single unit start in the £30 bracket, and climb steeply.

Given economics of this order, purchasers have to make doubly sure that they have got the right practical solutions to their individual difficulties. After all, shoulder-height screens may be all that is for one of numerous types of rigid, folding systems, or demountable partitioning systems, or for its shoulder—headheight screens.

Schools that are particularly vandal-prone will probably benefit from choosing flat-faced folding partitions rather than the concertina type; a single slash with a knife, says a manufacturer who has witnessed the effect, can do damage to a concertina partition out of all proportion to the effort involved.

The creation of a secretary's office where none existed before is a clear case for demountable partitioning: the hiving-off of a dining area from classroom space indicates the use of one sort or another

of folding wall; gymnasiums and very large halls present problems of their own. In cases where the decision to divide space seems absolutely final, the answer may look like a straight-forward and solid brick wall—but a fitter has produced a demountable version of that.

The wide range of partitions available is shown below in a selective list. In the case of both rigid and demountable partitioning, selection has been necessary for obvious reasons: numbers of manufacturers run into at least three figures. There are only a handful of folding partitions specialists by comparison.

**FOLDING/PULL-DOWN PARTITIONS:** Acordial (UK) Ltd

A range that covers all basic types of folding partitioning: the "movable wall" system, and the pull-across concertina partition, and the vertically operating divider screen for large areas, such as sports halls. Individual interlocking panels; one steel. Details from: Acordial (UK) Ltd, 304 Sandycroft Road, Richmond, Surrey TW9 3NG.

**Rigid Demountable Partitioning:** Clifford Partitioning Co Ltd. Clifford's supply partitions to Council and the Inner London Education Authority. The firm range starts with their Standard variety (glazed or solid); next onto the Flush Acoustic type, with its specially high sound resistance; taken to the Flush Wall ("designed to simulate the Flush Wall" design), normally achieved with brick and plaster, but without the damp and mess associated with the latter; and concludes with the shoulder height Clifford Barrier. Details from: Clifford Partitioning Co Ltd, Champion House, Burlington Rd, New Malden, Surrey.

**Rigid Demountable Partitioning:** Bridport-Gundry Ltd. Specialists in netting insulations for sports halls, and vertically retractable room-dividers, for use anywhere. The latter work on the principle of a mechanically-operated, double-faced roller blind; sizes range from large to very large. The space between the two curtain walls forms a sound trap; special sound absorbers can also be supplied to prevent noise filtering through the edges of the curtain. Details from: Bridport-Gundry Ltd, Bridport, Dorset.

**Brookhouse Modernfold Ltd** Two specialities: the ceiling-hung (with optional floor track) folding room divider of the concertina type, and the Divisiflex Operable Wall system. This, also ceiling hung, consists of pull-along sliding panels,

individually mounted; their size system allows them to slide right-angled corners. From: Brookhouse Modernfold Ltd, 25 Flaxman Square, London E8 3JN. A wholly-owned subsidiary of Educational Dept., an important specialist in sliding partitions, running on tracks. One particular type—visual lenses—has a special interlocking plastic rubber seal, sealed with plastic rubber. From: ESA Ltd, Esavian Way, Stevenage, Herts.

**Henderson Door Company.** Six types of acoustic "concertina" partitions; two—the 4,800 and 1,500—are specifically recommended for classroom use. In both, the partition's outer skin consists of fibreglass, fibreboard, a steel core. All run on ceiling tracks. Details from: Henderson Door Company of Tower Hamlets, Elmstald Road, London E17, Marley.

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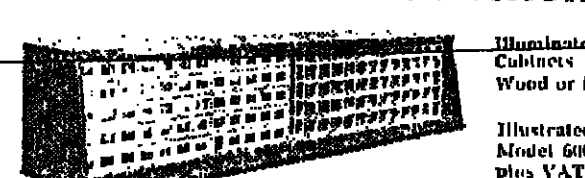


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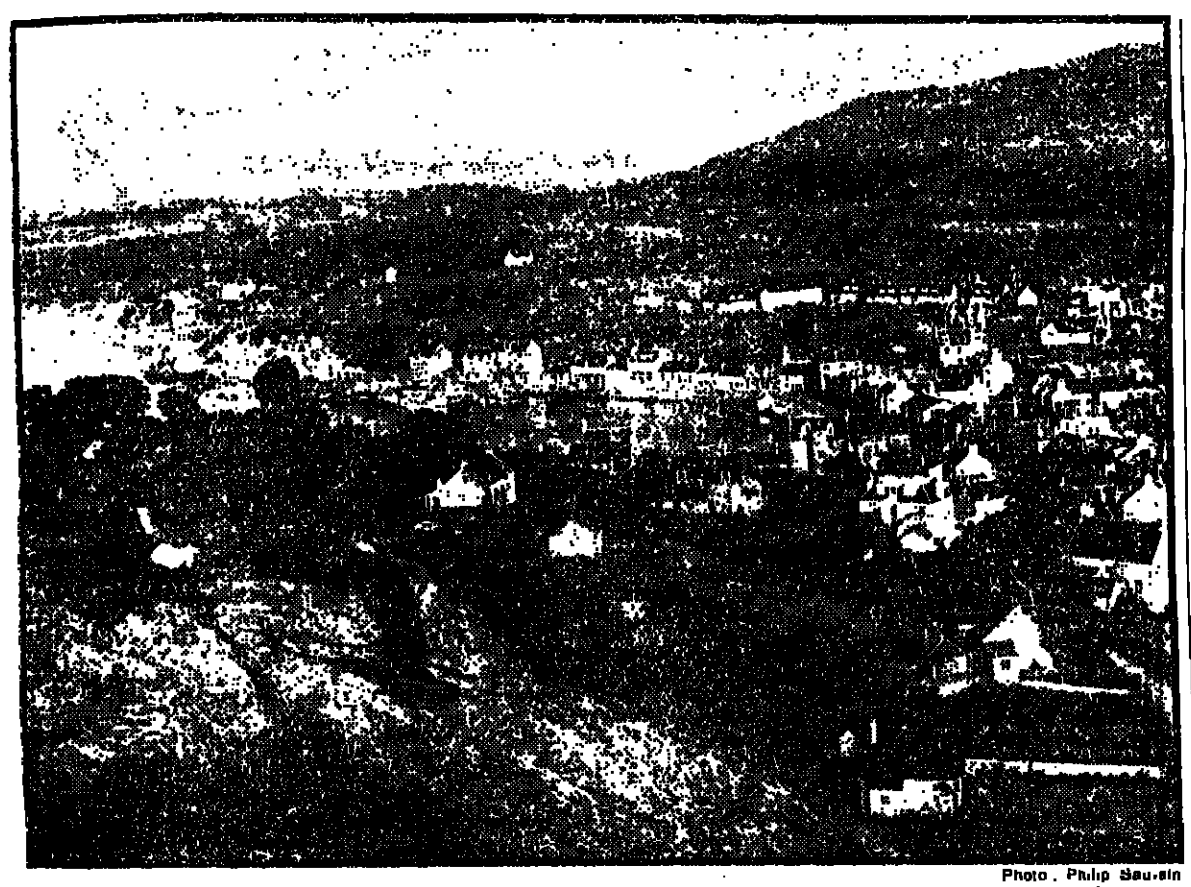
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# EXTRA

## Geography—methods and approaches



Tarbert, Argyllshire—The physical character of the earth and man's use of the land is the unchanging theme of geography.

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Education and the Ordnance Survey 42 • The geographer as teacher trainer 44 • Managing the geography department 45 • Schools Council 16-19 curriculum development project 46 • The Geographical Association Package Exchange 46 • The history of navigation 47 • Putting geology in its place 48 • A new national programme on computer assisted learning 50 • Using calculators 51 • Ideas for the junior school 52 • Third-year studies 53 • Maps and atlases 53 • A non-expedition to the Sahara 54 • Fieldwork in the Lake District 55 • The ship adoption scheme 56 • Book reviews

## Shifts of emphasis

Michael J. Wise describes how the quantitative approach to geographical studies in the universities has affected the teaching of the subject in the schools

"I know less geography than a schoolboy of six weeks' standing", said Charles Lamb in one of the *Essays of Elia* (1823). But he was well aware that the more progressive schoolmasters of his time were changing their attitudes to teaching.

The old schoolmaster—revolving in a perpetual cycle of declensions, conjugations, syntaxes and prosodies" and believing that all learning was contained in the ancient languages—had given place to the modern schoolmaster with his wider range of knowledge and grasp of natural phenomena whose teaching was given "as he walks the streets, or saunters through great fields with his pupils", rather than by formal instruction in school hours.

But Lamb's impressions of this educational revolution did not mention the problems of adjustment which it presented for many, perhaps most, teachers of that time, nor the long period of development and experimentation necessary to establish the new approaches, to develop the methods and to write the books.

The progress made since the revolution in geography teaching instituted by Mackinder and others in the 1890s—and marked by the founding of the Geographical Association in 1891—can be seen by following another of Charles Lamb's delights—"reading" the newspapers of 35 years ago.

The *Birmingham Post* of July 14, 1893 (a little more than 35 years, it is true), describes the Staffordshire Geographical Exhibition as "a notable example of the humanizing spirit in modern education". "For the child", it continues, "geography has been made... as exciting an adventure as belief, in the golden age of discovery, those conquistadores... coming upon new lands." Letters of children and schoolmasters demonstrated "the need to use scientific geography as an explanatory of man's relation to his environment."

My own geography lessons at

that time—under good teachers—were exciting ventures into great themes and, through attending meetings of the local branch of the Geographical Association, I realized what had been achieved through close collaboration between the great professors of the time, such as Flourens, Roxby, Stamp and Fawcett, and leading teachers and members of the Inspectorate such as Leonard Brunsell, L. S. Suggate and C. B. Thurston.

There have since been many addresses on the value of geography as a subject. Of special interest, since it appeared when the modern revolution in the university study of geography was just beginning, is a statement made by the Geographical Association to the central advisory council of the Ministry of Education on the education of boys and girls of 15 to 18.

There were three main points. First, the disciplines of the subject, which called for the accurate observation, recording and analysis of facts, the construction of logical syntheses and the resultant recognition of both harmony and disharmony, were particularly appropriate to the intellectual needs of young people.

Second, young people could obtain a balanced view of the world as a whole, a view of the present seen not only in relation to the past but as a link to the future that considered current trends in the use and organization of resources. Third, geography had a particularly valuable role in bridging science and the humanities.

But the mid-1950s saw the end of one tradition of university geography and a distinct change of tone and method. Whereas, for Mackinder and the older specialists, geography provided problems which were made more complex by the need to wrestle with the complexities of a dynamic subject. In a sense, Lamb's old and new schoolmasters were re-born within geography.

There came a new emphasis on

continued on page 42



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# Inflation hits the OS

W. G. V. Balchin suggests how schools can be helped to cope with new Ordnance Survey pricing policies

Geography is for many synonymous with maps and a close and mutual relationship between geography and the Ordnance Survey has been a feature of the last century. Each has supported the other and both have grown in strength and importance together.

But in the last three years strains have appeared in the traditional happy relationship as a result of new pricing policies introduced by the Ordnance Survey in response to instructions from their new masters in the Department of the Environment. The OS has now "moved to full recoupment of costs on its services in line with policy on all Government fees and charges".

For the educational world, and geography in particular, the financial problem is not only being made more acute, not only because rising costs have to be met from falling incomes, but also because rising OS costs are affecting three critical areas. The present and dramatic industrial decline of London—and the reasons for them, including the effects of government regional policy and of factors such as market accessibility, labour availability and cost, transport facilities and personal residential preferences by industrialists and workers.

At present the OS maintains that it has complete copyright on all the information contained on OS maps less than 50 years old. There is therefore considerable uncertainty, especially among research workers, about what data can be legally extracted from OS maps without reference to the OS and the payment of a fee.

The third problem area, which in the long term could have an adverse effect on the teaching of geography at all levels, is the OS decision to increase charges for the OS maps. The new OS map series, No 23, describes the restructuring of the main charge is the introduction of flat rate charges on a per copy basis, instead of rates based on the business users royalty scale, but discounted *pro rata* to the length of the print runs.

The effect of increased royalty charges where OS map extracts or OS derived maps are included in cartographic textbooks has now been well documented by the map publishers' group and the Publishers Association. The increases have been officially described by the Department of Prices, Policy and Consumer Credit as "often exceeding several hundred per cent of the previous charges".

The new charges were planned for introduction in three stages: January of 1976, 1977 and 1978. The map publishers' group reacted vigorously and early in 1976 they were asked in the House of Commons, and a lively correspondence took place in *The Financial Times* and *The Bookseller*.

To the OS these are small token fees, but £30 is a large item in many hard pressed geography budgets, while £1,000 would be a large amount for the hard pressed I.C.A. It is maintained by many that if this licensing system becomes obligatory, England and Wales should follow the example of Scotland, where a blanket licence costing £5,700 has been taken out for the whole country.

A similar licence for England and Wales would cost the Treasury around £50,000 and, incidentally, save an enormous amount of clerical work on the part of the OS and I.C.A. Whether or not this "token" subsidy to the OS is insisted upon, the finance ultimately comes out of the public purse and common sense suggests that an expensive administrative exercise ought to be avoided.

Details of the licensing procedure are described in OS leaflet New Series No 8. The educational sector seems to have been caught up in a procedure which was designed mainly for business and professional users. The charges shown even include those for a single copy, although the Copyright Act 1956 (Section 5) that a single copy may be taken free of copyright for the purposes of private research or study.

The copyright problem has been under discussion by the Royal Geographical Society, the Geographical Association and the Institute of British Geographers: all three bodies have expressed to the Royal Society's British National Committee for Geography, concern at the cable working arrangement between the Ordnance Survey and the educational sector.

As a result, the council has submitted to the Secretary of State for the Environment a detailed report on the difficulties created for the educational sector with a request that special arrangements should be introduced for educational needs.

The British National Committee for Geography believes that OS maps should be treated as less favourably than other Government publications. Government policy until recently appeared to support this view, since a Treasury circular dated January 9, 1972, stated that for Government publications, including charts and Ordnance Survey copyright fees would be "waived or reduced in respect of applications for reproductions for educational, technical or scientific purposes where the primary purpose of reproduction is for educational purposes and in other cases where... the commercial or other aspects are relatively unimportant".

Aggressively the new OS pricing policy followed by the Civil Service Department's general notice GEN 75/76, dated August 12, 1974, which replaces the Treasury circular of 1958. This new notice omits (whether accidentally or intentionally) is not known) the statement that such considerations for

One of the principal exponents of the new methods of recent years has remarked that their effect has been to bring fresh life to broad themes of the subject.

We have a greater range of ideas, a wider choice of approach and of method, and whichever of these we chose, the great theme related to the physical character of the earth and to man's occupation of it, and the continuing re-visited resources remain for study. All these are themes which can help give successive generations insight into scientific, social, economic and moral problems. In these tasks we are all involved, and they provide fruitful relationships between all of us, in our varied circumstances at universities, colleges and schools, who study and teach geography.

Michael J. Wise is Professor of Geography at the London School of Economics and Political Science and President of the Geographical Association, 1976-77.

saving or reducing copyright fees apply to charts and OS maps. The British National Committee for Geography believes that information on OS maps should be regarded as in the public domain and freely available for scientific and educational use: also, that there should be a return to the practices embodied in the Treasury circular of 1958.

The Ordnance Survey has, of course, been aware of these reactions from the educational sector and, while maintaining that it can do nothing to alter its new pricing policy, it has responded by creating a working party on educational requirements as part of its Local Authorities Advisory Committee structure.

This working party has a membership which includes representatives from schools, universities, examination boards, geographical societies and local authorities. Its terms of reference are "to examine the requirements of schools and examination boards for maps and mapping and to recommend changes in matters of publishing and supplying Ordnance Survey maps to meet those requirements".

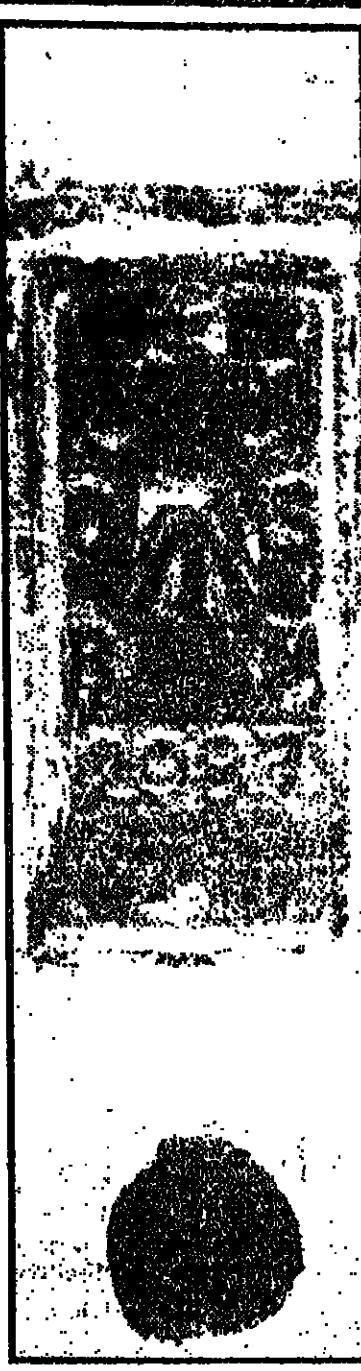
The working party has now met on three occasions (October 7, 1976, December 10, 1976, and March 14, 1977) and has considered a number of possible OS educational products ranging from large scale plans on cheaper paper to small scale map extracts produced in quantity for class use. The geographical representatives have been at pains to emphasize the need to regard maps as consumable items for both classroom and field use. The major need is for inexpensive working materials which can be "consumed" either in the laboratory or in the field.

It is likely that the OS will market map extracts based on quarter sheets of the 1:50,000 series as a first step towards a special educational series. At present many schools depend on surplus maps extracted from the examination boards, some confirmation here is clearly desirable, but the means to achieve this now exists. Extracts from the 1:25,000 series might also be possible.

Both primary and secondary teachers are also interested in large-scale plans of the area surrounding the school where they teach, but it is uneconomic to supply these plans in small quantities when copies can be copied so readily—assuming that the problem of a copyright licence has been overcome. The possibility of supplying overhead projector transparencies and 2 x 2 slides is also being investigated, but the costs so far quoted, suggest that low scale plans will be able to afford this kind of aid.

Local authority representatives are currently investigating the possibility of assisting both the teachers and the OS by acquiring resource stocks of maps of their own areas, which could be distributed to schools as and when required. The problem for the OS is that their production unit is geared to long runs of a small number of hours; it is not economic to undertake short runs of a large number of items.

It is axiomatic that the OS is as anxious as the educational sector to re-establish the traditional harmonious relationship, for the future OS market depends to a large extent on the foundation



Ordnance survey bench mark at Uffington Castle, Oxfordshire.

work undertaken in the schools. Geography teachers, in particular, have functioned in the past as a vast unpaid OS sales promotion force. But they need their samples to continue this work. Whether the powers that be in the Treasury and the Department of the Environment can be made to realize this vital point, however, remains to be seen.

Professor W. G. V. Balchin, of University College, Swansea, is a member of the Council of the Royal Geographical Society, a Trustee of the Geographical Association, a member of the British National Committee for Geography and also a member of the Ordnance Survey Working Party on Educational Requirements.

## Other maps

By P. F. Dale

Over the years George Philip and Son have established an international reputation for their cartographic products; the latest additions to their range further enhance this reputation. The *New World Atlas* and *The Universal Atlas* have much in common, literally and graphically, for almost all the diagrams, statistical data and maps appearing in the former also appear in the latter. In keeping with modern trends in atlas publication, each has an opening section containing photography, thematic maps, tables and a brief commentary. This is followed by a series of maps, principally dealing with the physical geography of the world, which cover some 128 pages in the shorter atlas and 176 in the larger. Finally there is an index with, in the case of the *New World Atlas*, over 44,000 entries and for the *Universal Atlas*, over 50,000.

Both atlases contain a section entitled "The Universe, Earth and Man" which has a strong visual appeal and makes effective use of maps, diagrams and photographs to describe the evolution of the Earth, its physical form, food and mineral resources, climate and patterns of trade, wealth and population. Although the level of generalisation is high, there is plenty of information to intrigue and inform the reader. The meat of the atlases lies however, in the maps which conform to the familiar house style of George Philip, Hill shading has been used to supplement layer tinting as a means of showing heights. Names conform in general to the local rather than to English common usage and are printed in styles which give prominence to those of greater importance; the majority, however, are of lesser significance and are printed in lighter script which, though allowing many names to be reproduced, could prove hard to read.

This criticism apart, and it is difficult to see how it could have been avoided, the maps are clear and concise and communicate effectively the message they contain. The *Universal Atlas* provides additional information in statistical form on climate and population whilst an "Economic Section" summarises the statistics on area, population, production, manufacturing and trade of some 113 countries. The atlas is well bound, comes in a protective case and at £8.50 is undoubtedly good value. The *New World Atlas* contains less information and is of lesser quality but nonetheless at £7.50 is a remarkably good buy.

These three titles give teachers the opportunity to offer relevant demanding material to all ability levels in the 14-16 age range. Each kit contains a very full Teacher's Guide, resource sheets, copyright-free worksheets for duplication, one or two colour filmstrips, overhead projector transparencies and a tape.

## Charting changes

By Bryan Waites

He follows this by inviting six colleagues to provide case studies entitled "Innovation in action". These deal with various aspects of curriculum development under the headings of "Project and school working together", "Implementing a resource based project", "Beyond the curriculum package", "A new examination syllabus" and "A school based development". These provide the practical applications of many points made in the first section of the book. The final part (which, in some ways, is the most controversial) examines future change.

The role and status of geography has changed so much, if not more, than most other school subjects and Philip Budden investigates this theme through five basic questions: What is school geography? How is geography learnt? Where does geography stand in the curriculum? When is geography learnt? Why learn geography?

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# Teacher education

Norman J. Graves looks at the tasks facing the geographer as teacher trainer

One of the days when a teacher trainer was a person who knew all the answers about how to teach something to somebody. Today the geographer who is in the business of preparing students for the classroom has to contend not only with the rapidly changing nature of his subject, but also with changes in educational theory, attitudes and practice in schools.

Let me illustrate this. Students on teaching practice may meet many different situations. On the one hand they may be asked to teach central place theory according to Christaller; on the other they may be told to teach minerals in Australia.

In one school they may be involved in trying to operate within an integrated scheme of world studies with untrained inner city children; in another they may be teaching traditional regional geography to children who are convinced that school is a good thing. In one school they may meet an almost laissez-faire attitude to the curriculum and possibly discipline; in another they will be told precisely what to do, how to do it, and how long to take over it.

There is therefore no simple model of teaching for which students can be trained; rather they need to be clear about their own values and to learn to tolerate the different situations they will find.

It is important for students to decide what the educational aims of the geography curriculum are. The discussion of such aims is an integral part of any training course. Geography contributes, like other subjects, to training in literacy, numeracy and graphically.

It also helps children to perceive space and spatial relationships, particularly in their own environment. They can thereby understand the spatial aspects of problems. In this way geography also contributes to environmental education.

But such aims can only give general directions to teaching, and students have to be able to plan specific teaching objectives. This is no easy task since most of us tend to think in terms of content. We will teach minerals in a game, because that has been a part of a course in Australia, rather than ask ourselves whether it will meet our educational objectives.

Objectives, content, teaching strategies and evaluation procedures are all linked in the teaching-learning system, but students tend to be much more concerned with teaching strategies or methods. Learning teaching strategies is not an easy process. Not only do students need to be made aware of the various approaches open to them, but they need to have practice in trying these out.

Inevitably some will enthusiastically rush in where others fear to tread. They need to acquire confidence in their ability to use, for example, group work, a simulation, audio-visual aids and so on. It is probably easier for them to gain confidence if they are not too worried about managing classes of 30 pupils or more.

Practice should be on small groups of five or six pupils with students working in pairs, or later singly. They need to feel that the college staff believe in their methods to practise them themselves. The formal lecture should be used sparingly to throw out ideas, while small group teaching, seminars and workshops should illustrate the strategies advocated.

Students also need feedback on their own performance as teachers, beyond the kind of feedback they get from children. Children can be given and negative. Students need to know how someone else sees them and though their supervisors may do this quite well there is more information if students can see themselves performing on a video monitor. However, this can be cruel too, so there should be no insistence on making this compulsory. Looking at someone teaching is useful for pinpointing difficulties and pitfalls—the writing on the chalkboard that no one can read; the map that is so complicated that disorientating it is a lesson in itself; the voice that lacks conviction; the body language which spells uncertainty or even fear.

More positively, a video tape may help an inexperienced student with a novel systems diagram; a session of group work with a simulation; a straight forward question and answer lesson in which the class is participating eagerly. Student teachers need ideas, other peoples' and their own, to try out in the classroom.

How can you teach about urban structure, fields of influence, breaking points, industrial location and linkages, glacial erosion, periglacial deposits, the world's weather system? What models should be used; at what level of understanding should an explanation of the monsoon be pitched; will the children know what kinetic energy is? All these are legitimate questions, and it is unhelpful to say the students will get the answers from experience. Maybe they will, but as students they have limited experience and are faced with teaching now.

Thus the geographer as a teacher trainer is forced to give immediate help by applying his knowledge of psychological research to the problems of teaching geographic concepts and principles. In the junior or lower secondary schools it is best to work inductively from case studies and empirical data to concepts and generalizations. Work from concepts by observation in the lower school (eg, a meander) to concepts by definition (eg, sinusosity ratio) in the upper school.



Students from Charlotte Mason College of Education on a field trip in the Lake District.

Formal hypothesis testing may be fine for those who have reached that stage, but try a few experiments with those still thinking in concrete terms.

What the teacher trainer geographer is trying to achieve is the independence of his student. He must encourage the student to develop his own strategies and help by applying his knowledge of psychological research to the problems of teaching geographic concepts and principles. In the junior or lower secondary schools it is best to work inductively from case studies and empirical data to concepts and generalizations. Work from concepts by observation in the lower school (eg, a meander) to concepts by definition (eg, sinusosity ratio) in the upper school.

## Fighting dereliction

Colin Ward

Conservation Scene. By Geoffrey Young  
Kestrel Books £2.75. Penguin Pencil 75p. 0 14047 089 1.

Readers will recall the Clean Steam Kit and the Clean Air Kit promoted by the Advisory Centre for Education and The Sunday Times and the same enterprise's coastal survey. These ventures had the virtue of being built around active investigation of environmental pollution. Perhaps it is significant that these initiatives came from outside the system. There were even whispers at the time from inside the system that this kind of over-supplied investigation might mislead the young with facile judgments based on inadequate information. These findings were silenced when Richard Meade reported the findings of thousands of students in *The Pollution Handbook* (Penguin 1974), and showed that the picture of the extent of environmental pollution which they built up corresponded very closely to the official figures including those not made public.

The same team of unofficial educators led by Geoffrey Young to create the WATCI club in collaboration with the Royal Institute of British Architects to build up a phalanx of active young observers of the built environment, to watch for signs of decay and dereliction and to press for improvement and renewal. This is positive conservation, not just antiquarianism, and is concerned with the day-to-day street scene, not just the architectural set pieces.

Geoffrey Young has now set out to provide a handbook for the young reader to indicate the how and why of the protection and improvement of the built environment, with an explanation of the planning system, suggestions for activity and a directory of organizations. He does not mince matters about the monstrous environmental effects of property speculation and about the blight of bureaucracy. The book which is full of telling photographs is an equally valuable guide for the adult user, and the paperback is, for these days, a bargain.

## World guide

Bryan Waites

Purnell's Concise Encyclopedia of Geography. Edited by Christopher Tunney.  
Purnell Books £3.50. 361 03261 7.

This companion volume to the Concise V series (which includes encyclopedias on nature and science) is a new, absorbing and beautifully illustrated guide to the world, its countries and the life of its peoples, and consists mainly of descriptive geography which will appeal to younger readers. It may be used as a family reference book.

The first section introduces the world as it is found in world geography. Further information is given on the solar system, the changing year, weather and climate, earth structure, the history of the Earth and Man exploring the world and world features. The second section is a basic dictionary of geographical terms which is useful, though rather restricted at about 600 items. The third section is the longest and consists of a country-by-country account of the world.

There is very little information on most countries and the accounts

# Managing the geography department

By James H. Rodger

The many varied forces influencing current school geography have posed many practical management problems for increasingly complex departments. In these circumstances it is too easy to become absorbed in short and medium-term decisions, and difficult to find a breathing space to consider long-term policy.

Too often this long-term policy is simplified either because of long standing traditions or the latest appealing innovation. But there is an urgent need—especially in the present educational climate—for geography departments to examine in detail their management problems and to establish an appropriate overall policy.

This should be the concern of every department member. But many departments are composed of individuals who support different geographical traditions. The wave of enthusiasm associated with the so-called "new geography" is now over and departments are now at different stages of development. Many members are still unsure about courses reflecting modern approaches and a quick glance through some CSE or GCE syllabus will confirm that there is still room for them to avoid these. There must, therefore, be more meetings between younger and older department members.

Discussion within the department may include such issues as the role of geography within the curriculum. Staff should be able to justify its inclusion, and be clear about how the department should employ its role. Given the varied pupil intake of most comprehensive schools and the different levels at which students study geography, departments define their aims relative to the type and degree of geographical knowledge and the levels of skill to be acquired. Valuable in-service training can thus be carried out within the department.

The delegation of duties within the department is also essential, and this should involve all staff. In practice this can be difficult for a variety of reasons; staff need to reexamine their priorities and a recommitment to professionalism must emerge if disillusionment is to be avoided.

Some of the most pressing management problems, however, come from three major concerns: what courses should be offered in the fourth and fifth years; how to allocate physical resources, and how to deploy staff.

Geography is tremendously popular at the moment within fourth year option systems. While this is satisfying, it must be tempered with the realization that this popularity is not always founded on the intrinsic attractiveness of the subject, and that it can be weighted towards the lower end of the ability range.

There is a greater need than ever for heads of departments to be aware of the relative strengths and weaknesses of members of their department and to use them properly. Similarly, physical resources must be used to their maximum effect and related to long-term department policies. The organization of examination groupings must become vital.

David Hall, on page 53, has accurately pinpointed the third year as problematic. If an integrated course has been studied in the first and second years, there may be little time for pupils to make sound choices and for staff

teacher may design. This may be physical studies, regional studies, or applied studies, and to some extent it meets a former criticism of the project that it was too restrictive and excluded physical geography.

In a context, then, of increasingly complex management problems and a greater range of possible strategies and solutions, I make a plea for geography departments to take a quick breath—to consider their overall policy and to be clear about where it is leading.

James H. Rodger is head of geography at Wolgarston Comprehensive School, Penkridge, Stafford.

## Ireland

By Bryan Waites

New Geography I. By E. Armitage and M. Grace. Gill and Macmillan. £1.50. 7171 0783 3.

This book is the first in a series of three intended for use in the secondary school with special reference to 11 and 12 year olds. It provides "source material for a systematic and integrated teaching of geography in the Irish context" and as such it forms part of the examination course. It is a reference change to find this information and to have plentiful Irish examples of geographical phenomena which will be new to most readers. In fact, this book would be a most useful source outside Ireland.

New Geography concentrates on the study of the local area as "a means to the understanding of geographical concepts and the development of geographical skills". Sensible combination of classwork exercises with general activities and practical fieldwork is well done. Perhaps there are too many in-text questions as well which produce a continuous barrage in addition to set exercises. However, the vocabulary seems, on the whole, to be appropriate for the age range. Simplification by omission some-

times induces errors. For example, there is a great deal of necessary information left out of the section on longitude.

The contents list does not justify the title *New Geography* and it is only on closer inspection that one finds justification in stream ordering, the meander index, a Tipperary farm game, a factory location game, network analysis and some hypothesis testing. Basically, however, the list extends in a conventional manner from local mapwork, weather, rocks, rivers, oceans and fisheries to people in other climates, transport, manufacturing industry and settlement. The book contains too much and the inclusion of people in other climates (Nigeria and Lapland) appears incongruous. The whole book might have been more selectively written despite the requirements of syllabuses.

Colour would have been an improvement, especially as some illustrations needed it very much, notably the OS map extracts which are much reduced in value and appearance by being in black and white. Many photographs too were clearly taken with colour and now have come out poorly in black and white, for example, the rock samples on page 12. However, no doubt the economies of the time imposed this on authors and publishers alike, regrettably leaving us with an austere book. Several aerial photographs are excellent and overall the illustrations add a great deal to the text and the authors use them well. Some diagrams are crudely drawn and out of perspective, however.

Readers will find the case studies on the port of Belfast, Dublin and fishing excellent source material. The section on farming is also very full and useful. The authors should be complimented on providing such a richness of involvement for the pupil through activities and exercises which are well designed and practical: the revision section at the end contains multiple-choice questions, crosswords and other devices to consolidate earlier work. This book reflects the hard work and experience of practising teachers and will be most useful to schools in Ireland and elsewhere.

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# 16-19 Project

### Michael Naish recounts an aspect of curriculum development

Is the great curriculum development steam engine gathering momentum, and if so, will it stand the strain? Our experiences in working on the Schools Council Geography 16 to 19 Project suggest that it is certainly gathering momentum.

Three earlier geography projects beginning in 1970 were, so far as outside observers could judge, at first met less than warmly, but in 1975, when news of the 16 to 19 Project first broke, there was an immediate response from teachers and lecturers wanting to get involved. It is a tribute to the work of the earlier projects that attitudes towards curriculum development are clearly changing for the better.

It is interesting to speculate on the effect of pronouncements by national leaders where advances in curriculum thinking are concerned. By curriculum thinking, we mean the constructive consideration of all the elements that go to make up a curriculum, from aims and objectives, through resources and teaching/learning approaches to evaluation and examinations.

The story goes that the rapid expansion of curriculum research and development in the United States followed President Kennedy's observations on sighting the first Sputnik in the skies. What will be the result of Mr Callaghan's recent pronouncements? The least we can expect is a gathering of momentum.

The need for a national project for geography in the 16 to 19 age group was made very clear at a conference held at the Schools Council in 1974. It was felt that there were several strong pressures arising from the contemporary position of geography in education which demanded reappraisal and development.

Some of these pressures for change are common to the 16-19 age group in full-time education, regardless of subject interests. The composition of the sixth form is changing, with an increase in the number of new sixth formers staying for one year only after 16, and with a wider range of ability in the group taking A level subjects. There is also the extension in the range of institutions for 16 to 19 year-olds.

Where the curriculum is concerned, the sign of the search for a more general 16-19 curriculum continues. In 1959, the Crowther report endorsed the principle of subject-mindedness and education in depth, but in the 17 years following that report, we have been assaulted by notions about "majors" and "minors", "electives", "Q and F" and others in a succession of unsuccessful proposals to ensure the adoption of a broader curriculum.

The current proposal is for the CEE examination after one year (at present in cold storage) and for A level to be replaced by five subjects to be studied to N (Normal) level, in two of the subjects F (Further) level. Feasibility studies are being carried out on proposals, which were put forward as long ago as 1973. When examination changes are in the air, it is very important that a curriculum project should exist to seize opportunities for development.

As well as these general pressures for reappraisal, the well documented changes in geography are a sharp spur to curriculum planning. As geography matures from a dominantly analytic and descriptive study to a theoretical science, there is an obvious need to reconsider its study at 16 to 19 year-olds. When developments in the subject are considered together with changes of emphasis in general educational objectives, there are possibilities for enhancing the value of geography in the school curriculum.

Further evidence of the need for a full curriculum examination came from an increase in the production of new texts, from the revision of some A level syllabuses, and from a result, the Geography 16 to 19 Project was proposed to the Schools Council in 1974, accepted in 1975, and work began in September, 1976.

The project has a team of three (two directly from school teaching) and a secretary and three years for development work plus one extra year for one member to continue with dissemination. Its aims are first for teachers and lecturers to reconsider the objectives, content

and teaching methods of geography for the 16-19 age range in schools, sixth form colleges and colleges of further education; and, second, to help teachers appreciate the significance of their role as curriculum developers.

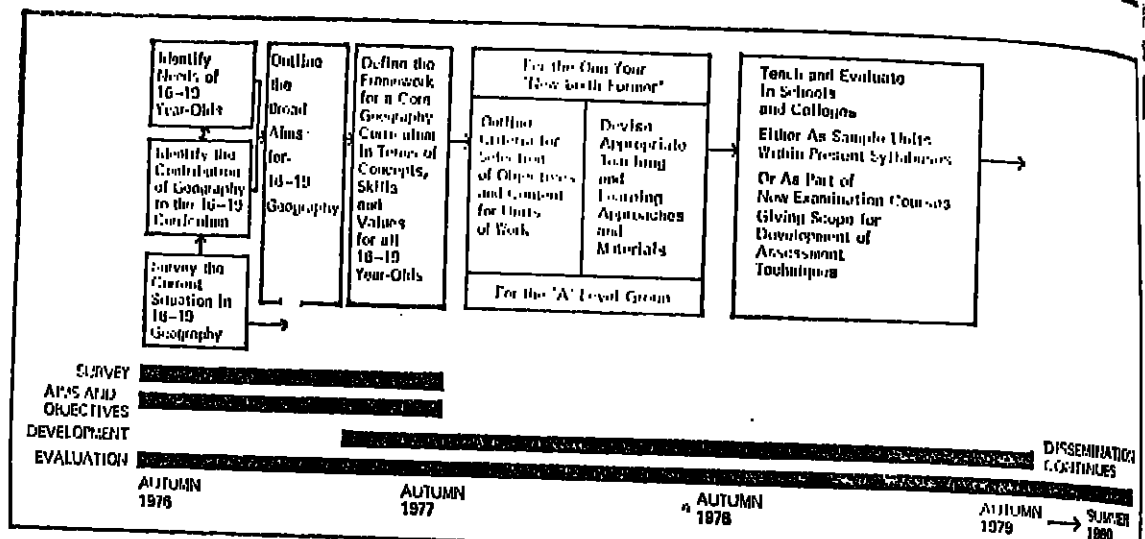
Teacher involvement has played an important part in the first six months of the project's work. Teachers, lecturers, advisers and inspectors have contributed to a nationwide exercise in considering aims and objectives, which culminated in a consultative conference and a series of representative working groups at the end of February. Results are being considered. A pilot questionnaire survey of present practice and opinion is currently being collated and analysed, and a network of trial schools is being established.

Involvement and consultation have also played an important part in the formulation of the project's plan for development, which, together with an indication of the time scale, is summarized in the diagram above. We hope the diagram will reveal the project's concern with teacher involvement;

with the whole range of ability 16-19 year olds; with the notion of a variety of teaching approaches based on a common core of geography for the 16-19 group; with the project playing a supportive role for teachers on the basis of co-structive units of work, and the recognition that styles of delivery may play a major role in determining what happens in class and fieldwork.

The curriculum development engine may be gathering momentum, but we think it may also feel the strain at a time of high inflation, education cuts, recession and teacher unemployment. To our way of thinking, this is no reason for cutting back on curriculum work. Indeed the future wellbeing of the nation may even depend upon it.

Michael Naish is a senior lecturer in geography at the University of London Institute of Education and director of the Schools Council curriculum development project, Geography 16-19. Team members are Ashley Kent and Eleanor Rawling.



## Computing help

by David Walker

Most geography teachers are totally unaware of how easily they can use computers in teaching or how valuable they can be.

The Geographical Association Package Exchange was established as a research project to investigate the exchange of teaching units (in program and an educational guide - hence package).

But it has found its major task is educational and its staff have devoted a lot of time to visits to courses, conferences, schools and colleges to talk to teachers and show how simply computers can process information or do calculations so that the teacher can get on with some effective teaching.

There are teachers who are over-optimistic. Recently a teacher in the Midlands, after hearing about the work of the project, said: "This is great, now I shall send my students to the computer, but even in the United States they find it extravagantly expensive and progress is slow."

If there are to be statistical techniques in the A level geography syllabus then teachers will have to learn them. But, as geographers, our main concern should be with the problems these techniques can deal with and the interpretation which can be placed on the results.

ences, that teacher's whole conception of the computer was changed. The package writer had worked out all the detailed instructions to the computer, leaving the user to respond to questions like "Would you like instructions?" by typing back "Yes" or "No".

When the Geographical Association started its package exchange early in 1976 it realized it would be pioneering, rather than meeting an established need. About 100 geography teachers were using the computer as a regular part of their teaching then. These had either had a lot of help from colleagues in maths or computer sciences, or were working in a pioneering authority like Hertfordshire where there was an advisory unit which had coordinated the development and distribution of geography packages.

Well over 800 secondary schools, and virtually all colleges, have computers, and those that have not could get some sort of computing assistance at very little cost and effort. Most teachers do not use the facilities largely because of the image they have of the computer. The idea of using a multi-million pound machine, quietly humming in a huge air-conditioned room tended by incredibly bright young programmers and systems analysts is daunting.

In practice the teacher never need go near the computer. There are two ways of using it from the school. Either send the selection of the package and the data to the computer centre and the results will come back some time between 24 hours and a week later, depending on the arrangements made by the authority, or communicate directly with the computer using an electronic typewriter that is connected by telephone line. It sounds improbable, but it works.

An additional problem is that it takes some time to appreciate that one is only dealing with a machine. At first there is always the fear that the message will come back "You fool, now look what you've done". The worst that happens in practice is a message such as "please type yes or no" after you typed "not sure" in answer to a question.

continued on page 47

# The way of a ship in the midst of the sea

Adeline Hartcup looks at the history of navigation

The navigation room at the Royal Maritime Museum, Greenwich, is one of those places where history and geography meet. It is also a place with a message. Visitors cannot fail to be persuaded that human beings are endlessly inventive, courageous, inquiring and skilful, carrying on in the face of daunting obstacles until their problems are solved and the distance has been explored.

The museum has a lot to offer the 1,250,000 people who come to it each year. (A quarter of those are children.) In summer, school and student parties must give 10 clear working days' notice to the education services department, which issues advance permits. The Greenwich education staff are all qualified teachers, who can be asked by letter or telephone to help plan a visit. Special programmes can be made to measure, museum staff will give illustrated talks

in the lecture theatre, and the junior centre—known as the half-deck—can be used as a classroom, for eating packed lunches, for painting, drawing and photography, model-making and even boat-building.

The navigation room is a long gallery in the most westerly of the museum buildings, nearest to Greenwich and London. In it, instruments, charts, globes, publications, prints, pictures and letter-press are clearly displayed to tell the story of navigation from the thirteenth century to the present.

The thirteenth century brought a revolution in navigation methods in the Mediterranean. The magnetic compass and systematic sailing instructions led the way. Charts were made, the passage of time measured, Arabic numerals used, and arithmetic, geometry and trigonometry applied to problems of navigation.

Early woodcut maps of the British Isles, Europe, Asia and America, made in Strasbourg in 1513, were still based on Ptolemy's descriptions, dating from the second century A.D. The great step forward came after the voyages of discovery of Portuguese, Spanish, Italian and French navigators in the first half of the sixteenth century.

At Greenwich there is a fine portrait, the earliest form of sea chart, drawn on a whole sheepskin, with a network of magnetic bearing lines. From these and the scale of distance, shipmasters calculated the distance between two points and the course to steer.

Renaissance exhibits include a splendid nautical almanac, with astronomical and tide tables, and a navigation textbook, printed in 1711, which must be one of the first scientific books written by an Englishman. Terrestrial and celestial globes can be seen alongside the dividers with which they were used.

Lutescences, compasses, astrolabes, quadrants, the first theodolite (an English invention), and a sundial are all finely made and clearly displayed. There is an ingenious nocturnal, an aid to telling the time at night, and a late seventeenth-century telescope, made of papier-mâché, gilt-tooled vellum and wood. It has five draw-tubes and extends to five feet when focused.

The oldest globe in the museum, a ship's one-hour watch glass, and a seventeenth-century graphometer were all valuable aids to the navigators who used them. So were nautical logs, pocket and overhead compasses, barometers, sounding machines and Admiral Howe's pioneer regulator clock, which had temperature control to give accurate indication of the time, regardless of the weather.

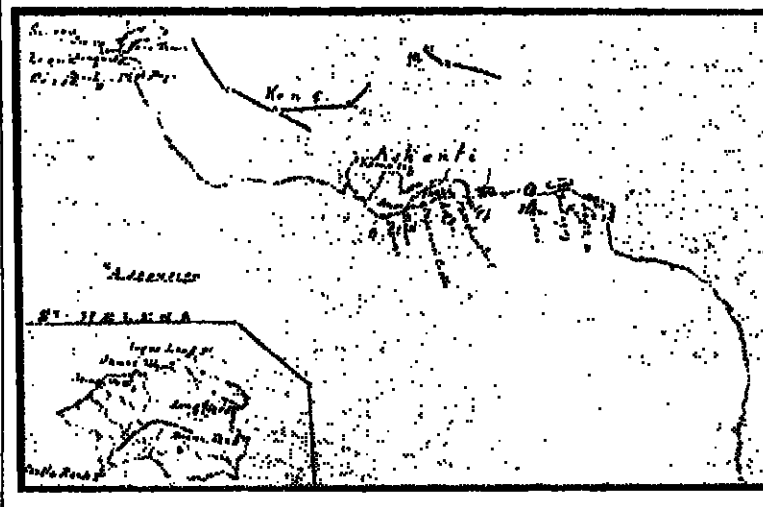
Before the eighteenth century there were no ways of finding standard time at sea or of measuring currents. A dramatic example of a shipwreck off the Scillys at that time points to the consequences of this. In 1675 Charles II established the Royal Observatory at Greenwich to solve the problem, and in 1714 Parliament offered £20,000 reward for any practical means of finding longitude at sea.

The watch invented by John Harrison (1693-1776) proved that an accurate timekeeper could be made for use at sea, and led to the development of the marine chronometer. George III allowed Harrison's H5 to be tested at his private observatory at Richmond and, when he was 80, Harrison received £8,750 for his invention.

But chronometers were expensive and were not supplied generally to Royal Navy ships by the Admiralty until 1818. They were the result of years of trial and endeavour, and came just before the days of steam navigation, which could not have survived economically without them. Standard time now, of course, is through the transmission of Greenwich Mean Time to all parts of the world by wireless.

John Harrison is by no means the navigation room's only hero. Captain James Cook is also there, and his remarks on navigational tables and on the early chronometer he took on his second voyage of exploration can be read in his photographic journal. Matthew Flinders, surveyor of the coasts of Australia, and William "breadfruit" Bligh, of the *Bounty*, are also well documented.

All this and much more can be seen in the navigation room. The seamen, inventors and craftsmen it commemorates had problems and a technology that compare with those of modern space travel. There has never been a more exciting story than that which tells "the way of a ship in the midst of the sea".



Map of the west coast of Africa from a boy's exercise book c 1876. Photo: Philip Savill

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# Teaching geology

Chris Wilson investigates the place for a minority study

In 1976, geology became the responsibility of the Schools Council's science committee rather than its geography committee. Hardly a world-shattering event, but perhaps a surprising one, particularly to science teachers and heads who seem to regard geology as an appendage of geography.

Indeed, the fact that this article appears in a geography supplement suggests that there is much to be done to enlighten non-geologists about the real nature of the subject in the late 1970s. So why did the Schools Council decide to change the way it treats geology—and what relevance does the reason for the decision have to other teachers, especially geographers?

Geology was, and still is, a minority subject (accounting for just under 2 per cent of GCE candidates), but over the past 10 years it has grown rapidly. It now has a thriving subject-teacher association (the Association of Teachers of Geology) with 1200 members, which appears relatively large compared to the 9,000 members of the Geographical Association (geography teachers for about 20 per cent of exam candidates).

There is no doubt that geographers have played a large part in introducing geology into school curricula. Most estimates suggest that about 60 per cent of geology teachers are geographers with a subsidiary training in geology, so the geographical image of geology is hardly surprising.

School geology's growing pains led in 1973 to the Association of Teachers of Geology, together with the Geological Society's education committee (which represented broader interests, including a university view) expressing disquiet to the Schools Council about the way geology was treated within the council's committee structure.

In response, the Schools Council set up the geology curriculum review group which was asked to examine the nature and extent of geology teaching in schools, and make recommendations about its development. The group's report was approved in 1976 and is about to be published as Schools Council working paper 58: *Geology in the School Curriculum* (Evans/Methuen Educational, £1.85).

The fact that neither the Schools Council's geography committee nor the science committee raised any objections to the transfer of geology from the former to the latter, reflects, in my mind, the fundamental changes that geology has undergone over the past 10 years. No one who takes an interest in scientific development can be unaware of the recent conceptual revolution in the geological sciences.

In the 1960s and early 'seventies, developments in geophysics and the exploration of the oceans led geologists finally to accept that continental drift had occurred and to formulate the new hypotheses of seafloor spreading and plate tectonics. The latter, now an almost universally accepted theory, sees the earth's crust as made up of a series of rigid plates, growing at some boundaries (mid-ocean ridges) and colliding along others (mountain belts).

In a matter of a few years, geology moved from the position of consisting of a vast array of seemingly unconnected observations, to a science possessing one unifying theory. Moreover, the new concept was so elegant and essentially so simple, that it made an immediate impact on the educational public through articles and popular television programmes like *Horizon* and science spectacles like *Restless Earth*.

At the same time as this, the applications and benefits of geology were being demonstrated around our own shores with the discovery of the North Sea oil and gas fields. And on top of all this, tragic regions of geological disasters such as volcanic eruptions, earthquakes and landslides.

No wonder then that the following definition of geology given in working paper 58 was accepted as the reason for transferring geology

from the Schools Council's geography committee to its science committee: "the application of the approaches, methods and techniques of the basic sciences and mathematics, and those special to geology, to the elucidation of Earth history and the use of these for the benefit of mankind".

There is still much to be done to ensure that this definition of geology is fully understood by other science teachers, by geographers, headteachers and local authority advisers. And by such understanding I include the realization that certain geological topics—the major features and evolution of our planet, and the origin and methods of location of its physical resources (such as coal, oil, ores and building materials)—are an essential part of any core curriculum.

I also hope that the publication of *Geology in the School Curriculum* will generate more understanding of the role geology can play in developing pupils' skills in observing, measuring, recording, interpreting, analysing and communicating. Indeed, geology can develop such skills—without expensive laboratories and can stimulate pupils to act outside and explore their environment, be it rural or urban.

These statements should not be interpreted as special pleading for geology, henceforth to be treated on a par with other major school subjects, though of course I hope to see geology become more popular. But I do hope that the publication of the working paper will help to make other teachers—particularly in the other sciences—more aware of the value of using



Stratification at Lulworth Cove, Dorset. Photo: Philip Savain

geological topics as a vehicle for teaching basic concepts and wave motion using earth waves, crystal structure, minerals, and evolution using geological records.

All this depends on collaboration between geologists as well as syllabuses and curriculum development are areas needing attention.

Exam syllabuses undoubtedly play a large part in defining content and structure of most middle courses, so syllabus designers have a responsibility not only to the 14-16 and 16-18 age range but to pupils in lower forms. Fortunately the majority of GCE and GCE exam syllabuses are

structured around geology as it was before the plate tectonics revolution. And even where the new concepts are included, they are sometimes tacked on to, rather than integrated with, the old divisions of palaeontology, petrology, mineralogy, and physical geology.

GCE geology has another problem in that A level syllabuses seldom built on O level knowledge. If this practice were to be changed, and A level syllabuses also built on a 14-16 knowledge of physics, chemistry and biology, some university departments would be less likely to continue their present attitudes of discouraging prospective applicants to take A level geology in favour of the other three sciences.

Yet it is the universities that control all but one of the GCE boards; they could bring about the changes that would benefit not only their prospective undergraduates, but also most school pupils for whom A level geology is a terminal course. Such changes at the top would in time work their way down the exam system and beyond into general science and environmental science courses (geology is largely overlooked in many of these).

The working paper makes recommendations about investment in curriculum development, but the Schools Council has deferred implementing any of these until there is some reaction to the report.

Such developments would give geology teachers the chance to work with universities, and with geologists from industry to produce resources not only for geology courses, but also that could be used in physics, chemistry, biology, environmental science, integrated science and geography courses.

I hope that the Schools Council's postponement of any proposals is temporary, for the review group considered them to be essential. After all, about £2m has probably been invested in various science curriculum developments over the past 15 years, yet geology has benefited from very little of it. Yet its relevance, to everyday life, particu-



Rocks at St Andrew's, Pifashire. Photo: Philip Savain

larly in these resource conscious times, is self-evident.

Geologists can only blame themselves for being overlooked in the past, but now the appearance of *Geology in the School Curriculum* provides geology teachers with an opportunity to express their views on both the place of geology in schools, and on the nature and extent of investment in new curriculum material.

Chris Wilson is Senior Lecturer in Earth Sciences at the Open University and Editor of *Geology Teaching*, the journal of the Association of Teachers of Geology. He was chairman of the Schools Council's Geology Curriculum Review Group from November 1974 until it completed its work in 1975.

# Fieldwork

By R. C. Vernon

*Field Geology in Colour*, by D. E. B. Bates and J. P. Kirkaldy. Mansford Press £2.75.

This book should join its two companion volumes by Professor Kirkaldy in the same series on the shelf of every student of geology, covering as it does in part one every basic requirement for fieldwork. Geology is so essentially a subject to be studied out of doors that a geologist was specially trained in space-flight to enable him to explore the surface of the moon. But if the use of the land is to be understood and communicated to others, the student must know what he is looking at and how to make his notes and maps in the proper form. Here the authors have given him very practical advice about planning and dealing efficiently with specimens on the spot. Even Charles Darwin was in dismay when he found that some of the labels had come adrift from his South American specimens.

Part II gives a detailed description of the three main series of rocks and their structures which, as well as being fascinating reading, is a valuable reference source.

The collection of photographs is superb, all scaled to size; items of equipment, and every illustration in the text on safety in the field, and details are given of sources of further information and suppliers of equipment.

# Volcanoes

By John Gribbin

*Volcanoes of the Earth, Moon and Mars*, by G. Fielder and L. Wilson. Paul Elek £6.00, 236 31097 G.

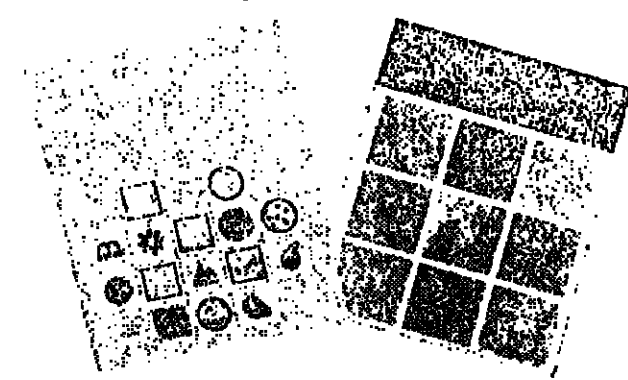
This is a well-packaged account of current ideas in one important area of Earth sciences—a term which it now seems reasonable to stretch to include aspects of planetary science, in the same way that only a pedant would quibble about the use of the term "geology" to describe features of the Moon, Mars and other planets. The topical interest provided by the photographs from space probes and, in the case of the Moon, samples of material from off the Earth, provides editors and contributors with an opportunity to present ideas which are in fact still based largely on studies of our own planet in a new and attractive way.

The arrival of the US Viking spacecraft at Mars, to provide further pictures (and data from sophisticated instruments packages), makes the book even more topical, and already one might speculate about the need for an updated edition in a year or so, including both new Mars material and the recent data from Mercury obtained by Mariner 10 which is only briefly mentioned in this volume.

But all that should not deter prospective purchasers from obtaining the book. It is as sound as one would expect from the authors, all members of the Lunar and Planetary Unit at the University of Lancaster, with good use of displayed material in the form of both tables and figures and well on target for its intended audience of "those having sixth form science", or perhaps even for a slightly less scientifically advanced readership. Surprisingly, perhaps, in view of both title and authorship, the book is only marginally about planets in general; I should have liked to see more about the formation and evolution of planetary atmospheres in particular.

One hypothesis offered in brief is that the atmosphere of Mars produced by volcanic activity may still be accumulating, with the implication that a denser atmosphere more suitable for life as we know it and allowing freely flowing water could yet appear on our neighbour planet. This is just the opposite of the widely publicized idea of some United States space scientists, that a dense atmosphere with free water was once present on Mars, and it is frustrating not to see the two models "compared and contrasted"—an exercise, perhaps, for the curious reader?

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# Sixth form resources

Roger Robinson describes a new national programme on computer assisted learning

Several examination boards are revising A-level geography to encourage more understanding and to demand more thought from the student. At the same time almost all A-level courses now include some quantitative element.

Set these developments against the background of changes in geography as a discipline, and it is clear that traditional A-level classroom resources are inadequate, and often inappropriate, for teachers and students today.

The CALUSG Project (Computer Assisted Learning in Upper School Geography) is producing some resources that can be used in existing sixth form courses, and which can provide lesson materials related to the demands of new developments.

Teacher and students need have no computer expertise to use CALUSG teaching units, nor access to computing facilities.

The project team use the computer to store and analyse information, and to print tables, graphs, diagrams and maps. Printout sheets are duplicated and used in teaching units. These include student guides with structured exercises, supplementary material for students and teachers, and specific data on printout sheets.

One theme is that of *Cities*. Figure 1 shows an exercise from Unit one: *Gross Population Density*. In the unit these exercises are interspersed with an explanatory and descriptive text written by research fellow Jim Fenner and the Project Director.

The exercise suggests that the students use an isopleth map of population density to draw a cross-section through the city centre. Data for several cities are available, and the sample city can be chosen when ordering the unit.

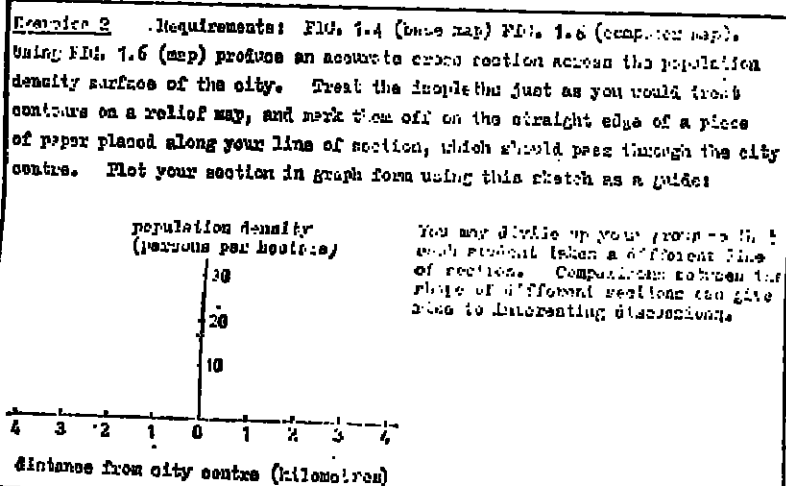


Fig. 1. An exercise from "Cities" Unit 1.



Fig. 2. Isopleth map of gross population density, Birmingham.

The students are then asked to study a composite representation of their cross-section in exercise three. This stage uses a graph of population density against distance from the city centre. Figure three is a similar graph used later in the unit, and is A4 size. The graph is produced using a computer package called the *Geographical Statistical Package (GSP)* which John D. Blackburn (CALUSG Research Fellow) is developing. GSP has a built-in link to SYMAP for special maps.

Key Sheets are provided to help students interpret maps and graphs. The students are then asked to study a composite representation of their cross-section in exercise three. This stage uses a graph of population density against distance from the city centre. Figure three is a similar graph used later in the unit, and is A4 size. The graph is produced using a computer package called the *Geographical Statistical Package (GSP)* which John D. Blackburn (CALUSG Research Fellow) is developing. GSP has a built-in link to SYMAP for special maps.

The arithmetic graph of population density and distance leads to the refinement of the final graph Figure Three, which has the population density axis transformed logarithmically. All the data used in the graphs and maps are tabulated in a list of the sample city's wards.

This particular unit leads on from the empirical generalization of Figure Three, which has the population density axis transformed logarithmically. All the data used in the graphs and maps are tabulated in a list of the sample city's wards.

The set of educational material for each unit (students' guide etc) are common to several alternative sets of printouts for different sample areas. Mention has already been made of alternative cities (London, Bristol, etc) suitable for A-level courses, and for much of this style of A-level learning would be as indigestible as continuous notetaking.

Teachers and students interested in computing should find the CALUSG computer package (GSP) very useful. It should eventually be possible for schools to add data sets to the CALUSG data file. Thus they could study their own town or do their own analysis of their own data, and produce maps, graphs, tables, etc.

To do this GSP (which is written in a computer language called ALGOL 68 R) would have to be implemented on local computers used by schools or I.E.S. Eventually this kind of facility should be a great help to students with individual projects or schools engaged in local investigations.

Anyone interested in further information about CALUSG should write to: Roger Robinson, CALUSG Project Director, Teaching Research Unit, Faculty of Education, University of Birmingham, Edgbaston, Birmingham, B15 2TT.

It is hoped to publish a further article by David Boardman, deputy project director, evaluating computer-assisted learning in the *November Geography Extra*.

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# Using calculators

By Philip Sauvain

A major stumbling block to the acceptance of the techniques and concepts of the "new" geography used to be the sheer drudgery involved in working out long statistical exercises. It is easy enough to know how to calculate mean and standard deviation but another thing to work them out on paper (at least half-an-hour's work on 30 four-digit numbers, for instance).

Most of the geographers who faced these problems for the first time 15 or 20 years ago had access to few aids to computation apart from tables giving squares and square roots.

All this has changed. Simple electronic calculators have become Christmas "stocking-fillers" and a reliable calculator with squares, square roots and trigonometric functions can be purchased for less than £10.

This 30-minute statistical exercise takes less than 10 minutes now with a simple calculator—provided care is taken to ensure that the correct numbers are fed into the machine and that the appropriate formula is used. Errors can easily be made and unless a printing calculator is used, there is no method of checking each stage of the exercise.

A printing calculator can cost £100 upwards and have few functions. It may be of interest then, to geographers, to know that an acceptable alternative is available for little more than the cost of a normal calculator. The thirty-minute statistical exercise which used to take an hour can now be done in 10 minutes—using a calculator which has been pre-programmed to work out mean and standard deviation is used.

The trouble is that information about these sophisticated calculators is not readily available in the form that most people would wish to have it—how you actually operate the machine to calculate these statistics. Two calculators may be advertised as having this facility but the time taken and the opportunity for user-error may be much greater on one machine than on the other. A shop demonstration rarely proves adequate, even if there is an assistant who knows how to switch it on let alone run through a standard deviation programme.

The truth of the matter is that a highly sophisticated technology is now available at a ridiculously cheap price. The two do not go well together. Inevitably scientific instruments really demand expensive sales techniques such as skilled demonstrators and detailed literature at different levels of understanding (for the professional buff and for people like the geographer or educationist without advanced mathematical knowledge).

It is only by chance that I have been able to explore the possibilities offered by two programmable calculators—the SR-56 from Texas Instruments (about £55) and the Novus Statistician 6035 (on offer in March at under £20).

The SR-56 has a detailed owner's manual and applications manual, both aimed at the huffin rather than the non-mathematician. Nonetheless, it offers many facilities which can make a great difference to statistical work in geography.

The calculator is pre-programmed to work out mean and standard deviation rapidly and an extensive study of technical literature will show how the machine can be programmed to calculate the product-moment correlation coefficient or to work out permutations and combinations. With scientific functions and many advanced programming routines it offers remarkable scope and value at its discount price.

The Novus Statistician 6035 is a simpler, less sophisticated and much cheaper machine which seems to me to be ideal for the non-mathematical geographer seeking a calculator to speed up statistical calculations. Mean and standard deviation for instance, are calculated merely by displaying each number in turn and pressing the SUM x key. When all the values have been entered the arithmetic mean key and the memory recall key are pressed one after the other to display the mean and standard deviation.

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# Feet in the sand

David Wright took his students to the Sahara

There are innumerable Saharan expeditions. Each one sets out to be tough, to reach the unreachable, to add to human knowledge, and to get free baked beans and toilet-rolls. Despite the latter items, each expedition is also expensive.

"Sahara 77" set out to be a "non-expedition". It was not that the normal expedition was wrong; merely that there was only a week available and the student-teachers had less than £100 in the world. We did not start with the arrogant assumption that 10 students could significantly extend the research frontier: the thousands of man-hours and the millions of pounds invested by United Nations agencies suggested that this would be a totally inappropriate aim. On the other hand, this "non-expedition" was not mere adventure, as teaching practice was looming.

Teaching about deserts in schools seems to have stagnated at the camel caravans and the nomads still dominant in the topic. The impressions, the photographs and the hardware—

everything from rock-specimens to Arabic calendars—that we gained should create more accurate and up-to-date impressions, so participants should be able to reach in a more interesting way and to discuss development issues more meaningfully. Hopefully, too, the student-teachers will be able to encourage affective as well as cognitive work: "death by textbook" in the United Kingdom.

The students willingly accepted a topic to study beforehand in order to be a resource-person during the week on history, geomorphology, farming, settlement, nomadism, transport, etc. This approach worked, and the attitude that work and enjoyment were at two ends of a spectrum was noticeably absent throughout the week—a most refreshing and rewarding contrast to the apathy produced by over-doses of lectures.

To keep within the £90 budget, it was a question of cutting a very ordinary package-holiday jet from

Garwick to Monastir. Next morning, the 9.02 train—new and comfortable, but still only 1p a mile—got us to Gabes Oasis by 14.30. Two million olive trees and twenty camelpoplar were enthusiastically studied from the windows, but uncounted: we unashamedly remained non-scientific impression-collectors, and considered the 10 days spent by a university group on a traffic-count in Sousse, the worst waste of time and money we had ever come across.

After the initial journey to Gabes, flexibility was the key. There had been no reply to letters asking about bus times from Gabes—the Tunisian Tourist Office in London even denied that buses existed in the south. But buses there were, and so we only had time to glance at the regional development policy making a dramatic impact around the new port, before our first experience of a sardine-bus into the arid hills and to the troglodyte-village of Matmata.

Two nights in Saharan caves was, perhaps, the most memorable event of all. And, by meeting on the bus the head of a remote village school, some of the group were able to visit the village and the school, which was first reached by public transport only a year ago. The flexible schedule allowed an impromptu seminar on comparative education—the students were very impressed with the traditional teaching, since the pupils seemed more literate in two languages than some English pupils were in one.

Next day, there was no room on the Gabes bus, so half the group bargained for a lift in the back of a lorry—a competent driver and a seven-hour wait at the most interesting bus-stop in the world. Fortuitously, a double-fare 80-mile taxi-ride from Gabes to Kébili is still less than travelling by British Rail, so the finances were not overtaxed by missing the last bus from Gabes.

Kébili, our hotel was an ex-Roman legion fort; we should have reflected on the brutal nature of imperialism, but I fear we merely enjoyed the first showers and clean loos for three days. Below the fort were sand-dunes and the oasis. To the north, the Chohf el Djerdid—the treacherous salt lake. We even rescued a minibus that was sunk up to its axles—an ideal basis for classwork on "Survival in the Desert".

To the south, Douz—the end of overwater, and the first rainy day, frankly, for nearly a year. Magnificent 100ft-high dunes; I wanted to avoid too much emphasis on sand dunes, since they occupy 10 per cent of the Sahara and 80 per cent of teaching about the Sahara, but they are ever so nice to run down.

So back to Sousse—a marathon ride on the 6 am post-bus broken by a quick visit to the magnificent Roman coliseum at El Djem, which reminded us that Britain was the Third World to the Romans. Sousse, which looked so remarkably bustling and modern. But London looked just the same as the day we left, 20 years ago. Time really is measured by the number of new experiences gained.

Merely a traveller? Yes, but a journey of the mind as well as the body. Although we brought back few statistics and no questionnaire results, the 700 impressions from our 700 miles and seven days included all the major types of desert and semi-desert environments, and created some sort of picture—incomplete, unbalanced, and some-



Learning the hard way that an object can easily sink through the soft crust into the mud.

time-inaccurate, but less so than most materials about deserts that one finds in schools, which were written long ago, by people who have not been there at all.

David R. Wright is lecturer in Geography at Keswick Hall College of Education, Norwich.



Reading the dust in the empty rain gauge.

# Fieldwork in the Lake District

Tony Johnson has made good use of Cumbrian Youth Hostels

There is nowhere so small in area yet so large and varied in its appeal as the Lake District. It comes as no surprise to learn that for the tenth successive year, youth hostel "overnights" have set a new record.

The adjacent Seathwaite Valley is a magnificent glaciated valley for geographical fieldwork. The high views from Windermere are well worth the easy ascent. There are no tourists, no souvenir shops, just one local with a hikers' bar for the staff, and a really first-class hostel warden well used to large school parties. The hostel is warm and comfortable; being in the wettest valley in England, it has good drying facilities and welcome hot showers. On warm summer days the Derwent is fine for bathing.

It is by far the most popular hostelling area in Britain. There is a choice of 22 youth hostels in which to stay—and 289,726 people stayed in them in 1976, making them the best used hostels in the country. There are simple, "get-away-from-it-all" hostels, like Coniston Coppenrines, high above the village, reached only by a path.

Special field study facilities, including workroom, equipment, books and day-time access, are provided at Hawkshead and Ilgh Close. Ambleside and Patterdale are two of the very few four star special grade hostels in Britain. For the tough adventure holiday, the Junior Nature Trail or the A level fieldwork student, Lakeland has its own attraction. There is something for everybody.

Two personal favourites of mine lie away from the day trippers, care and tourist havens, and are thus well suited for school journey parties. Longthwaite, in log cabin style, is beautifully situated in a wooded valley beside the west bank of the River Derwent in Borrowdale. It is a good centre for mountain walking in reach of Scafell and Great Gable.

The nearby Grisedale valley is a perfect glacial study, complete with hanging valleys, scree slopes, old lake bed, mistle stream, moraine and classic U-shaped. In fine weather there are relatively easy walks to Red Tarn, and for the more adventurous across Striding Edge to Helvellyn. High Street and Blea Water are within another exhibition of the lake's work from the hostel, while Kirkstone Beck provides an interesting walk and river study close at hand.

For attractive excursions, as well as the Ullswater steamship services,



For the A level fieldwork student, Lakeland has its own attraction. There is something for everybody.

there is the Mountain Gout minibus service to transport small groups from Patterdale to Windermere. Small boats are available on the lake, there is bathing in the river, pony trekking is an increasingly popular pastime, and back at the hostel there is again a friendly warden who claims to cook your fried bread in Dublin when heavy rain is forecast.

A particular boon on wet days, but well worth a visit on any day, is the Brockhole National Park Centre. If you are using a coach to get your party to the lakes, but have no transport once you are there, it is a very good plan to call in at Brockhole for a Lake District introduction on your journey to the hostel. Booking is essential for group visits, but on a wet day a telephone call will suffice.

There is an excellent walk-round exhibition depicting vividly the Lake District in all its aspects. A good lead-in for your visit would be their National Park talk and slide programme which illustrates the geology, ice age, lakes, trees and country code. The bookstall is a treasure trove of information with admirable leaflets on rocks, weather, wildlife, place names, tourism, and many other things for your pupils to buy at just a few pence each.

The pupils can escape in the gardens and grounds along the shores of Lake Windermere while the teachers seek refreshment or visit their very own information room, packed with practical help on wet weather alternatives, fell safety and recreational activities.

My own preference is to keep the coach with me for the duration of my Lake District visit. It is obviously useful for easier access to different walking points and for market day in Keswick. Even so, with accommodation and three meals at Patterdale costing £2.75 a night, I can still take a group of 30 pupils from southern Britain to the Lakes at a total cost of £16 for four nights, all in.

For information sheets, including Buildings and Gardens, Historical Interest, Guided Walks and Nature Trails, and safety leaflets, including Water Safety and Are you going on the Fells? write to The Lake District National Park Information Service, Bank House, High Street, Windermere. The Brockhole National Park Centre is at Brockhole, Windermere, telephone 2231.

with Settlement and Services including growth simulations for Aldershot and an imaginary Forestow, location of a new town, and Mr Dinkels' special favourite, post box exercises.

There are some very useful regional case studies which emerge from the activities suggested rather than being presented as set pieces. Some of these are on the hierarchy of settlements.

As before, the most important feature of these books is that they fully involve the pupil and also suggest additional ideas for teachers. Will teachers have the OS map sheets needed and referred to several times? Is there an over-stressing of physical factors in the siting of settlements? Can we ask pupils to plot place names indiscriminately without careful checking? Is not the visual impact somewhat overwhelming? Can the pupils really tackle the undigested material on Liverpool's, Sheffield's and Crawley's functional areas? Surely their visual maturity is not sufficient. Similarly, the visual complexity of the section on Indian towns is too much. The final section, in Settlement and Services has echoes of the Leicester Town Trail through its environmental appraisal form and its encouragement towards environmental awareness. Perhaps in this excellent and valuable series more room should have been found for reflection on environmental quality.

Bryan Walter



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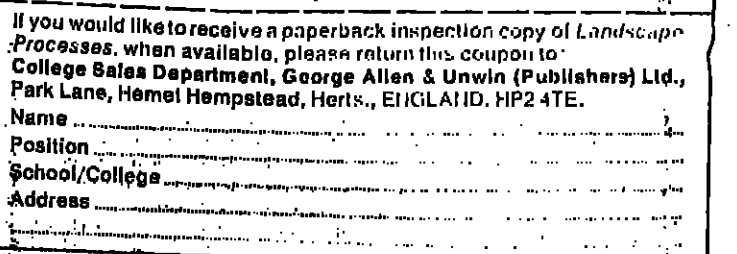
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# Travellers' tales

### A. C. Vaigo describes the mutual benefits of the ship adoption scheme

Ship adoption is a splendid activity, which brings a breath of sea air into classrooms and provides useful knowledge of the shipping industry, foreign countries and overseas trade. It is guided by the British Ship Adoption Society (founded in 1936) and operating now under a new management within the Seafarers Education Service (207 Bilham High Road, London S.W.17).

Although the number of schools involved has shrunk recently, between 500 and 600 still participate. Approximately half are associated with individual captains, skippers or senior members of the crew, while the others are attached to trawlers, tugs, tankers, tramps or even warships. There are similar schemes in Scandinavia, the United States and in the Commonwealth.

Most personal links develop into happy and intimate relationships, the continuity of which is unaffected when the officers concerned change the flag. From the pupils' point of view, the more often they move, the more fresh information they can supply.

By comparison, a school tied to a vessel may have to wait for a considerable time, if the ship is sold, mortgaged or scrapped. Such a vacuum could be very frustrating.

Schools benefit from the adoption in many ways. They receive interesting data about the ships, such as their voyages, cargoes, ports visited, weather conditions in various places and daily routine on board. They may be shown with pamphlets, pictures, maps, charts, calendars, boomerangs, corals, foreign stamps and coins, colour slides, films, rock samples and many other specimens, which stimulate and can be used as first-rate teaching aids.

Ships adopted by handicapped

children have made often generous gifts to their young friends, especially at Christmas. One crew gave a London school almost £1,000 to buy a minibus and camping equipment.

At the school end, ship voyages and whereabouts are marked on large wall maps, while most other items are exhibited in a ship's corner or in special display cabinets. Letters from sea are either read out in class or duplicated as news-sheets for all children involved. Some schools prepare worksheets from the correspondence, use the material for C.S.E. projects.

Although much of this takes place in geography (and humanities) lessons, other subject teachers normally make good use of the information too. "It stimulates the pupils' interest in many directions and encourages them to improve their efforts," said an American teacher active in the scheme.

A North Yorkshire school (it has three links with the sea) has received fascinating reports from its trawler skipper on the birth of Sturtey off Iceland (he was fishing nearby at the time) and about his confirmation with Icelandic gunboats, which cut his fishing gear twice in a week. He also told them about the Great Bank, Bear Island, Lapps and their reindeer. White Sea fishing grounds, sea-ice network around Iceland, icebergs, catch sizes, fish prices and many other details, hardly found in textbooks.

Long accounts arrived from the school's ocean-going tug, which served as a protection vessel during the height of the God War. Previously it had towed oilrigs, assisted crippled super-tankers and waited at salvage stations. All that made exciting reading.

More news poured in from the third link—a large bulk-carrier, operating at first in the Pacific and later between North America and Europe. Her masters (they changed command at six months' intervals) wrote lengthy stories on the Los Lica empire in Peru, raw sugar shipments from Queensland to Singapore, iron ore from Australia to Japan, fertilizer from Ocean Island to New Zealand farmers, timber from Oregon, sulphur from Vancouver and life in Red China's ports.

One of them described a dash out from Thunder Bay in Canada, before the Great Lakes began to freeze. His wife, who accompanied him, recorded the shopping trips to Norway, Rotterdam, Oslo and elsewhere. A radio officer went to the NASA centre at Houston and placed the school on the mailing list of space-age literature.

The school's trawler skipper and the captain of a "big boat" (when loading steel and ingots) invited parties of busy and energetic friends (and homes) and entertained them lavishly. They also showed films at school and answered many questions put by a pupils' interest in many directions and encourages them to improve their efforts," said an American teacher active in the scheme.

Swedes, for instance, organize international sailing camps, group travel abroad and educational visits to shipyards. The Dutch run a weekly radio programme for pupils and staff for sending speedy com- mands to their faraway sailors. The Danish national society issues handsome adoption certificates to schools and ships. Norwegians arrange conferences for liaison staff, representatives of ship-owners and mariners, where new plans are discussed and obstacles ironed out. "Such informal meetings at the grass-root level are most valuable for our success," said Magne Graff, retired secretary of Norsk Skipsa- dopsjon.

Teachers are invited to write inspection copies to JOHN MURRAY, 50 Albemarle Street, London W1X 4RD

ships to the physical environment. They are being jointly published by Bartholomew, who now provide the base for marketing the Essette Map Service educational programme in Britain.

Dr Herbert A. Sandford, one of the principal advisers for the British editions of these atlases, introduced a research article on the classification of world regions in school geography" by quoting the inaugural address of the late Professor David Linton at Sheffield University.

"It is a prime need of any scheme of geographic education that it shall provide a stimulus to work within which later acquired knowledge can always find a place," Dr Sandford went on to modify successfully Professor Austin Miller's scientific diagram of climatic types on an ideal continent.

He has added similarly related, and therefore easily memorized, rainfall parameters to separate the desert, grassland and forest areas of the "hot," "warm" and "cool" temperature zones from tropical to mid-latitudes. This scheme can be applied to the world or continental maps of environmental regions as presented in the Essette environment programme.

Both teacher and student should find great stimulus and encouragement from the new materials as a major educational towards an easier understanding of the environmental relationships on the earth's surface.

John C. Bartholomew is cartographic director of John Bartholomew and Son.

erally aware that conventional methods of portraying relief do not justice to the almost continuous variations of texture and colour in the landscape. Deserts, whether in Australia or the Sahara are not the green pastures that most layer-coloured maps would suggest.

Satellite photography, especially in the clear conditions over the arid regions and the tropics, makes it possible to distinguish the various vegetation zones as well as the effects of man's efforts at cultivation and urbanization.

Starting from these clearer images the cartographers of Essette Map Service were able to establish a colour scale to convey the application in the depiction of the actual environment in its summer aspect. Thus, tropical rain forest is a rich dark green; savannah; light green; steppe; pale brown; desert; arid pink; cultivation; corn; yellow; forest; medium green; tundra; warm grey; and ice; cold blue-white.

At the same time, the artist creates the illusion of a third dimension from variations of colour and shadow. The new map then presents a synthesis of the physical and human environments in a way that is designed to meet the needs of modern curricula in geographical teaching.

Starting from the environment map it was clear that the same materials should be adapted to the same programme. Wall maps, school atlases, and globes obviously had to be included in the programme, and the growing use of overhead projectors it was decided that transparencies would also be needed. Intensive research showed that overhead transparencies did not supplant wall maps, but that they were a place for both.

The wall map being subject to closer inspection is more detailed, while the overhead transparency is designed for combining a wide range of additional components to the environment base, such as boundaries, communications, physical or town names, population distribution, sea. The wall maps include portrayals of the marine environment with bathymetric relief-shading and ocean surface contours.

The globe is the "real" map and ought to be the first map a child meets at school, so as to establish correct concepts of land and sea relationships on the sphere. Thus a small 16-cm diameter steel globe of robust design has been created with the same colour scheme as the other materials.

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WILTSHIRE COUNTY COUNCIL  
100, GILBERT ROAD, LEICESTER, LE1 7JH  
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Recruitment Posts continued from page 40

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Recruitment Posts continued from page 40

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**Other Posts on Scale 2 and above**

**DURHAM**























### STATES OF JERSEY EDUCATION COMMITTEE

**Le Rocquier School (Group 8) Co-Ed.**  
Headmaster: D. R. McGragor

This new School, comprising of suites of rooms for academic subjects, practical subjects block and a P.E. complex will accept its third year intake of all ability children in September, 1977.

Required from 1st September, 1977:

**Scale 1 Posts**

- Teacher of English
- Teacher of Mathematics
- Teacher of French
- Teacher of Environmental Studies
- Teacher of Physical Education
- Teacher with the Remedial Department

Application forms and further details from the Director of Education, P.O. Box 142, Highlands, St. Saviour, Jersey, C.I., to be returned to the Headmaster as soon as possible.

### METROPOLITAN BOROUGH OF STOCKPORT

**Primary**

Required for September 1977  
Bridge Hall Infant School, Bridge Hall Estate, Stockport  
**HEADTEACHER** (Ref. 391/7E5)

Group 4.  
Applications are invited from suitably qualified and experienced teachers. Special interests should be indicated.  
Application form to be returned to the Director of Education.

**Secondary**

Required from 18th April, 1977, for Summer Term only, Goyt Bank School, The Fairway, Otterton.  
**TEACHER OF CRAFT SUBJECTS** (Ref. 392/7E5)  
Scale 1.

Required for 1st May, 1977, or as soon as possible, Bradbury Comprehensive School, Harrytown Lane, Romiley.  
**TEACHER OF SPANISH/FRENCH** (Ref. 392/7E5)  
Scale 1.

11-18 Co-educational, comprehensive school, which will have approximately 1,850 pupils on roll in September, including a 6th Form of 70. Teacher to share in the teaching of Spanish and French at all levels and abilities. The Faculty of Modern Languages, which is young and enthusiastic, enjoys excellent facilities including a Tandberg Language Laboratory and operates a Pupil Exchange to Twin Schools in France and Germany.

Required from 1st May, 1977, for the Summer Term only, Goyt Bank School, The Fairway, Otterton.  
**TEACHER OF FRENCH** (Ref. 392/7E5)  
Scale 1.

French is taught in the school up to "A" level.

Required for Summer Term 1977 only, Marple Ridge High School, Hibbert Lane, Marple.  
**TEACHER OF PHYSICAL EDUCATION** (Ref. 391/7E5)  
Scale 1.

To promote a wide range of physical activities throughout the age group. Applicants should be able to develop and maintain basketball and rugby.  
Temporary appointment.

Required for September, 1977, Stockport School, Mile End Lane, Stockport.  
**HEAD OF MIDDLE SCHOOL** (Ref. 391/7E5)  
Salary—Senior Teacher.

The School, which was formerly a maintained grammar school for boys, was re-organised in 1974 and now has an all-ability intake in years 1, 2 and 3 (boys only). The post involves responsibility for the welfare and discipline of years 3, 4, 5 (a total of 550 boys). It is not linked to a particular subject. Removal expenses may be paid in approved cases.

Cheadle Hulme High School, Woods Lane, Cheadle Hulme  
**MATHEMATICS SPECIALIST** (Ref. 395/7E5)  
Scale 1/2.

Teacher to contribute to a large and lively department in this 11-18 comprehensive school. Candidates must be able to teach to "A" level. A scale 2 post could be available for a suitably experienced applicant.

Required for September, 1977, or earlier if possible, Bramhall High School, Seal Road, Bramhall  
**TEACHER OF MATHEMATICS** (Ref. 393/7E5)  
Scale 1.

To teach mathematics throughout the school. The ability to offer "A" level Statistics would be a considerable advantage and an interest in teaching the S.N.P. scheme is essential. A temporary full-time or part-time appointment for the Summer Term from 2nd May, 1977 would be considered.

Application forms from the Director of Education, Town Hall, Stockport (quoting reference) and return to the Headteacher, unless otherwise stated, by the 7th April, 1977.

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**TEACHER OF MATHEMATICS** (Ref. 393/7E5)  
Scale 1.

To teach mathematics throughout the school. The ability to offer "A" level Statistics would be a considerable advantage and an interest in teaching the S.N.P. scheme is essential. A temporary full-time or part-time appointment for the Summer Term from 2nd May, 1977 would be considered.

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### City of Manchester Education Committee

Unless otherwise stated all posts are available from April, 1977, and application forms, together with further particulars, are available from the Head of the Authority to whom they should be returned.

**HEADSHIP**  
**SPECIAL SCHOOLS**

**GREAT MORETON HALL RESIDENTIAL SCHOOL**  
New Road, Moreton, near Congleton, Cheshire

Required from September 1977—  
Applications are invited from suitably qualified and experienced teachers for the post of resident Head of the Great Moreton Hall Residential School (Group 513) Congleton, near Congleton, Cheshire. The school presently caters for 7-16 year old ESN(M) boys whose background problems require them to be placed in a residential setting. An increasing recognition of the need for facilities to meet the special needs of handicapped children and the need for facilities to meet the needs of children who are less severely handicapped will be made a priority of provision to be made at the school in the future. A candidate with a commitment to education with educational, emotional and social problems is sought to lead an enthusiastic team of teachers and care staff.

Application forms from the Chief Education Officer (S.D./J.C.), Education Offices, Crown Square, Manchester M60 9BB.  
Closing date April 8, 1977.

Assistance with removal expenses given in approved cases for permanent full-time appointments.

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Assistance with removal expenses given in approved cases for permanent full-time appointments.

### COUNTY OF SOUTH GLAMORGAN

Required for September unless otherwise stated.

**SPECIAL**

**LLANDEYRN HIGH SCHOOL, Cardiff (11-18)**  
PARTIALLY HEARING UNIT: Scale 2 plus Special Schools Allowance

Qualified teacher of the deaf to take charge of a well equipped unit organized on an integrated basis. This is a re-advertisement.

**SECONDARY**

**PERMANENT SUPPLY STAFF: Scale 2 (plus travelling expenses)**

Applications are invited from suitably qualified and experienced teachers for appointment to a small team of comprehensive schools throughout the county. The teachers appointed will be based at a school and a car allowance is payable.

Applicants should preferably be able to offer at least two of the following subjects: Mathematics, physics, chemistry and modern languages, economics, history and geography.

**CATHAYS HIGH SCHOOL, Cardiff (11-18 comprehensive)**

**FRENCH: Scale 1**  
To teach from May 1, to teach the subject up to and including form five. This is a temporary appointment for the summer term only.

**CARDIFF HIGH SCHOOL (11-18 comprehensive) 6 form entry**

**BIOLOGY: Scale 1**  
Graduate to teach biology to 'O' level and C.S.E. Integrated Science to years 1 and 2, and Chemistry to year 3. An advantage would be the ability to teach Biology to year 4. The post involves a considerable amount of 'A' level work.

**FITZALAN HIGH SCHOOL, Cardiff (11-18 comprehensive) 12 form entry**

**ENGLISH/DRAMA: Scale 1**  
To teach English up to C.S.E. and 'O' level with some Music/Welsh: Scale 1.

To assist in the main with these subjects in the lower school.

**HOWARDIAN HIGH SCHOOL, Cardiff (11-18 comprehensive) 6 form entry**

**MATHEMATICS AND PHYSICAL SCIENCE: Scale 1**

To teach mainly in the lower school, but opportunities to teach 'O' C.S.E. will be given.

**LLANDEYRN HIGH SCHOOL, Cardiff (11-18 comprehensive) 9 form entry**

**FRENCH: Scale 1**

Possibility of sixth form teaching. An ability to offer English would be an added recommendation.

**GIRLS' PHYSICAL EDUCATION: Scale 1**

To teach throughout the school. The ability to offer dance and mathematics would be an advantage.

**HEATHFIELD HOUSE R.C. HIGH SCHOOL, Cardiff (11-18 comprehensive) 9 form entry**

**SCIENCE: Scale 1**

The post includes the teaching of Biology to C.S.E. and 'O' level and Physics and Chemistry to junior forms.

**LADY MARY R.C. HIGH SCHOOL, Cardiff (11-18 comprehensive) 7 form entry**

**MATHEMATICS: Scale 1**

To teach the subject throughout the school.

Application forms may be obtained, on receipt of a stamped addressed envelope, from the undersigned in whom complete details should be returned within 10 days of the appearance of this advertisement.

**J. J. ADAMS, Director of Education, Education Offices, Kingsway, Cardiff.**

### Royal County of BERKSHIRE

Closing date, unless otherwise stated, April 12, 1977

Language Allowance £150 p.a. payable in the Bracknell and Slough District. Lodging allowance and technical expenses schemes in operation: assistance with removals in approved cases. Applications should be sent to the Head Teacher unless indicated otherwise. Please enclose a stamped addressed envelope.

**Nursery School**

**TEACHER Scale 2**  
**SLOUGH CENTRE NURSERY SCHOOL**  
Buckingham Avenue East, Slough, RG1 1AA. Required April, 1977. Nursery Trained Teacher, Scale 2 plus Special Schools Allowance. Fully qualified and experienced. Details from the Head Teacher, Slough 111111.

**Primary Schools**

**HEADTEACHERS**

**BEECHWOOD COUNTY JUNIOR SCHOOL**  
Carnegie Close, Woodley, Reading, RG1 4AG. For September, for the Group 5 School. Forms and further details from the District Education Officer, Reading, RG1 1AA.

**Primary Schools**

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**HEADTEACHERS**

**BEECHWOOD COUNTY JUNIOR SCHOOL**  
Carnegie Close, Woodley, Reading, RG1 4AG. For September, for the Group 5 School. Forms and further details from the District Education Officer, Reading, RG1 1AA.

**Secondary Schools**

**ENGLISH Scale 2**  
**HIGHDOWN COMPREHENSIVE SCHOOL**  
Bury Hill, Emmer Green, Reading, RG4 8LZ. For September, for an experienced teacher to take charge of the English department. Details from the District Education Officer, Reading, RG1 1AA.

**SCIENCE Scale 1**  
**WESTWOOD GIRLS' SCHOOL (COMPREHENSIVE)**  
Honey End Lane, Tilehurst, Reading, RG2 9JG. For September, for a teacher to take charge of the Science department. Details from the District Education Officer, Reading, RG1 1AA.

**ENGLISH Scale 1**  
**HIGHDOWN COMPREHENSIVE SCHOOL**  
Bury Hill, Emmer Green, Reading, RG4 8LZ. For September, for a teacher to take charge of the English department. Details from the District Education Officer, Reading, RG1 1AA.

**SCIENCE Scale 1**  
**WESTWOOD GIRLS' SCHOOL (COMPREHENSIVE)**  
Honey End Lane, Tilehurst, Reading, RG2 9JG. For September, for a teacher to take charge of the Science department. Details from the District Education Officer, Reading, RG1 1AA.

**Special Schools**

**HEADTEACHER**

**THE PARK SCHOOL**  
Middenshall Road, Slough, RG6 2JG. For September, for a teacher to take charge of the English department. Details from the District Education Officer, Slough, RG6 2JG.

### Westminster County Council

## LEEDS CITY COUNCIL

### DEPARTMENT OF EDUCATION

Applications are invited from suitably qualified teachers for the following posts in the Authority's service.

**Religious Education**

**DYWIDOR COMPREHENSIVE (BOYS) (180 on roll) (Age Range 11-18) De La Bache Street, Swales, HEAD OF DEPARTMENT. SCALE 2. (Post Ref. 202/1.77).**

**Special Schools**

**PENYBRYN E.S.N.(M) SENIOR (MIXED) (148 on roll) (Age Range 11-16+), Glasbury Road, Clwa, Swansea. Handicapped children. Diploma in Special Education or equivalent and/or relevant experience in the education of handicapped children. SCALE 1 plus S.S.A. (Post Ref. OS2/2.4.77).**

Application forms and further details of specific posts are available from the undersigned on receipt of a stamped addressed footcup envelope quoting the appropriate post reference.

**CLOSING DATE:** The closing date for the receipt of completed application forms is THURSDAY, 7th April, 1977.

John Beale, Director of Education, Education Department, Princess House, Princess Way, Swansea.

### Royal County of BERKSHIRE

Closing date, unless otherwise stated, April 12, 1977

Language Allowance £150 p.a. payable in the Bracknell and Slough District. Lodging allowance and technical expenses schemes in operation: assistance with removals in approved cases. Applications should be sent to the Head Teacher unless indicated otherwise. Please enclose a stamped addressed envelope.

**Nursery School**

**TEACHER Scale 2**  
**SLOUGH CENTRE NURSERY SCHOOL**  
Buckingham Avenue East, Slough, RG1 1AA. Required April, 1977. Nursery Trained Teacher, Scale 2 plus Special Schools Allowance. Fully qualified and experienced. Details from the Head Teacher, Slough 111111.

**Primary Schools**

**HEADTEACHERS**

**BEECHWOOD COUNTY JUNIOR SCHOOL**  
Carnegie Close, Woodley, Reading, RG1 4AG. For September, for the Group 5 School. Forms and further details from the District Education Officer, Reading, RG1 1AA.

**Primary Schools**

**HEADTEACHERS**

**BEECHWOOD COUNTY JUNIOR SCHOOL**  
Carnegie Close, Woodley, Reading, RG1 4AG. For September, for the Group 5 School. Forms and further details from the District Education Officer, Reading, RG1 1AA.

**Secondary Schools**

**ENGLISH Scale 2**  
**HIGHDOWN COMPREHENSIVE SCHOOL**  
Bury Hill, Emmer Green, Reading, RG4 8LZ. For September, for an experienced teacher to take charge of the English department. Details from the District Education Officer, Reading, RG1 1AA.

**SCIENCE Scale 1**  
**WESTWOOD GIRLS' SCHOOL (COMPREHENSIVE)**  
Honey End Lane, Tilehurst, Reading, RG2 9JG. For September, for a teacher to take charge of the Science department. Details from the District Education Officer, Reading, RG1 1AA.

**ENGLISH Scale 1**  
**HIGHDOWN COMPREHENSIVE SCHOOL**  
Bury Hill, Emmer Green, Reading, RG4 8LZ. For September, for a teacher to take charge of the English department. Details from the District Education Officer, Reading, RG1 1AA.

**SCIENCE Scale 1**  
**WESTWOOD GIRLS' SCHOOL (COMPREHENSIVE)**  
Honey End Lane, Tilehurst, Reading, RG2 9JG. For September, for a teacher to take charge of the Science department. Details from the District Education Officer, Reading, RG1 1AA.

**Special Schools**

**HEADTEACHER**

**THE PARK SCHOOL**  
Middenshall Road, Slough, RG6 2JG. For September, for a teacher to take charge of the English department. Details from the District Education Officer, Slough, RG6 2JG.

**Special Schools**

**HEADTEACHER**

**THE PARK SCHOOL**  
Middenshall Road, Slough, RG6 2JG. For September, for a teacher to take charge of the English department. Details from the District Education Officer, Slough, RG6 2JG.

### LEEDS CITY COUNCIL

### DEPARTMENT OF EDUCATION

Unless otherwise stated—  
Closing date is 14 days after the appearance of the advertisement.

In respect of Headships and Deputy Headships in all schools, and other posts in primary, middle and special schools, forms are available from, and returnable to, the Director of Education, Department of Education, Great George Street, Leeds LS1 3AE.

For other posts in secondary and high schools, application by letter should be made to the head teacher of the school concerned, giving full details and the names of two referees. The post reference number should be quoted on all correspondence. Requests for forms and details should be accompanied by a stamped, addressed envelope.

**SPECIAL SCHOOLS**

**DEPUTY HEADSHIP**

**N.E.202 BOSTON SPA COMPREHENSIVE (MIXED) (148 on roll) (Age Range 11-16+), Glasbury Road, Clwa, Swansea. Handicapped children. Diploma in Special Education or equivalent and/or relevant experience in the education of handicapped children. SCALE 1 plus S.S.A. (Post Ref. OS2/2.4.77).**

Application forms and further details of specific posts are available from the undersigned on receipt of a stamped addressed footcup envelope quoting the appropriate post reference.

**CLOSING DATE:** The closing date for the receipt of completed application forms is THURSDAY, 7th April, 1977.

John Beale, Director of Education, Education Department, Princess House, Princess Way, Swansea.

**Primary Schools**

**SCALE 2 POST**

**N.W.181 YEADON WESTFIELD JUNIOR SCHOOL (No. on roll: 265) (Age Range 7-11), Yeadon, Leeds, LS19 7JW. Telephone No. 503395. Head Teacher: Mr. J. Hillingworth.**

Required for September, 1977, an experienced teacher for a class of second and third year juniors. Special interest in Gymnastics or Music would be advantageous, but not essential.

**SCALE 1 POST**

**S.214 WOODSIDE E.S.N.(M) SCHOOL (No. on roll: 188) 11-16 years. Westland Road, Leeds, LS11 5SB. Telephone No. 700170. Head Teacher: Mr. S. D. Gardie, M.Ed.**

Required for September, 1977, a temporary teacher for one year in this partly open plan school. A teacher of basic subjects is sought who also has enthusiasm for another aspect of the curriculum.

**PRIMARY SCHOOLS**

**SCALE 2 POST**

**N.W.181 YEADON WESTFIELD JUNIOR SCHOOL (No. on roll: 265) (Age Range 7-11), Yeadon, Leeds, LS19 7JW. Telephone No. 503395. Head Teacher: Mr. J. Hillingworth.**

Required for September, 1977, an experienced teacher for a class of second and third year juniors. Special interest in Gymnastics or Music would be advantageous, but not essential.

**SCALE 1 POST**

**S.214 WOODSIDE E.S.N.(M) SCHOOL (No. on roll: 188) 11-16 years. Westland Road, Leeds, LS11 5SB. Telephone No. 700170. Head Teacher: Mr. S. D. Gardie, M.Ed.**

Required for September, 1977, a temporary teacher for one year in this partly open plan school. A teacher of basic subjects is sought who also has enthusiasm for another aspect of the curriculum.

**Middle Schools**

**SCALE 2 POSTS**

**E.198 WHINMOOR MIDDLE SCHOOL (No. on roll: 295) 9-12 years. White Lath Road, Leeds, LS14 2UG. Telephone No. 607691. Head Teacher: Mr. W. Spence, R.A.**

Required for September, 1977, to work in this 3 form entry, semi-plan middle school opened in 1975; teacher to be responsible for developing an already established resources centre. The person appointed must have an interest in Humanities and will work initially in the first year term.

**E.216 ARTHUR GREENWOOD MIDDLE SCHOOL (No. on roll: 240) 9-13 years. Bramham Drive, Leeds 11, Telephone No. 799419. Head Teacher: Mrs. J. L. Dutton, R.A.**

Required for 1st September, 1977, an experienced teacher to be responsible for girls' welfare. Applicants should state special subjects.

**SCALE 1 POSTS**

**E.198 WHINMOOR MIDDLE SCHOOL (No. on roll: 295) 9-12 years. White Lath Road, Leeds, LS14 2UG. Telephone No. 607691. Head Teacher: Mr. W. Spence, R.A.**

Required for September, 1977, two teachers for this developing 3-form entry, semi-plan middle school. One teacher will be responsible for organising P.E. and Games; the other should have an interest in Art.

**N.E.203 ALLERTON GRANGE MIDDLE SCHOOL (No. on roll: 800) 9-13 years. Fallow Avenue, Leeds, LS17 0SP. Telephone No. 666250. Head Teacher: Mr. R. Burns.**

Required for September, 1977, teacher of HANDICRAFTS. The school has a well-equipped Handicrafts room and the successful applicant will be expected to concentrate mainly on the teaching of Woodwork-Metalwork.

**High/Secondary Schools**

**GUSELEY ST. MARY'S R.C. SCHOOL (MIXED) COMPREHENSIVE (11-18 years) (Age Range 11-18), 1529 GALEY, Telephone No. 982252. Head Teacher: Mr. J. J. Dutton, R.A.**

Required for September, 1977, teacher of HANDICRAFTS. The school has a well-equipped Handicrafts room and the successful applicant will be expected to concentrate mainly on the teaching of Woodwork-Metalwork.

**SECOND DEPUTY HEADSHIP**

**N.W.186 Required for September, 1977, SECOND DEPUTY HEAD TEACHER (Group 10) to assume responsibility for co-ordinating development and to be responsible for the school's general development. The successful candidate should have a minimum of 5 years' experience in secondary schools and a qualification in French, German, History, R.T. or Music would be welcome but candidates unable to offer any of these should certainly not be deterred from applying.**

**SCALE 3 POST**

**N.W.187 Required for September, 1977, HEAD OF GERMAN. The subject enjoys Priority with French in the upper band of each year. The first 'O' level German entry will be presented in 1978.**

**SCALE 1 POSTS**

**N.W.188 Required for September, 1977, R.T. SPECIALIST. It is hoped to enter candidates for J.M.H. and C.S.E. examinations next year, and the person appointed would possibly have some teaching at this level.**

**N.W.189 Required for September, 1977, MUSIC SPECIALIST. Interest in development of choral work welcomed. Entusiastic candidates will also be considered. Subject taught to 'A' level. Ability to help students to help with Lower School (years 5 and 6) History, Geography, French or German would be a recommendation.**

**N.W.190 Required for September, 1977, P.E. (Man or Woman). Excellent facilities include Sports Hall.**

**Senior Teacher Posts**

**E.199 CROSS GREEN SCHOOL (No. on roll: 1,870) 13-18 years. Cross Green Lane, Leeds, LS9 0BB. Telephone No. 491501. Head Teacher: Mr. G. S. Ramon.**

Required for September, 1977, in this mixed purpose-built comprehensive school: FRENCH, CHEMISTRY, PHYSICS.

A scale 2 may be offered to a suitably qualified and experienced applicant for one of these posts. There are new appointments created within an expanding Science Department in which the subjects are offered to C.S.E., 'O' level, C.S.E. and 'A' level.

**SCALE 1 POSTS**

**E.201 CROSS GREEN SCHOOL (No. on roll: 1,870) 13-18 years. Cross Green Lane, Leeds, LS9 0BB. Telephone No. 491501. Head Teacher: Mr. G. S. Ramon.**

Required for September, 1977, in this mixed purpose-built comprehensive school: FRENCH, CHEMISTRY, PHYSICS.

A scale 2 may be offered to a suitably qualified and experienced applicant for one of these posts. There are new appointments created within an expanding Science Department in which the subjects are offered to C.S.E., 'O' level, C.S.E. and 'A' level.

**SCALE 1 POSTS**

**N.W.191 HORSFORTH SCHOOL (MIXED) COMPREHENSIVE (No. on roll: 1,146) 11-16 years with possibility of 5th Form in September. Lincote Lane, Horsforth, Leeds, LS18 5RF. Telephone No. Leeds 812265. Headteacher: Mr. D. Squires, B.Sc.**

Required for September, 1977, in this purpose-built comprehensive school, opened in 1972, with facilities for youth clubs integrated: teacher of RELIGIOUS EDUCATION who will also be involved in the school's work in SOCIAL STUDIES (personal relationships as a core study for senior pupils). A person is looked for who, perhaps through joining in activities, can make a significant contribution to the school community.

**N.W.192 Required for September, 1977, P.E. (Man or Woman). Excellent facilities include Sports Hall.**

**Senior Teacher Posts**

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**N.W.192 Required for September, 1977, P.E. (Man or Woman). Excellent facilities include Sports Hall.**

### CYNGOR SIR GWYNEDD COUNTY COUNCIL

**Ysgol Gyfun Llangeifal**  
(Comprehensive 11 to 18; 1,130 pupils)

**Second in the English Department**

Required for September, 1977, a lively, energetic graduate teacher of English who can participate in extra-curricular activities and share the teaching of the subject to "A" level. Scale 2.

Application forms from Area Education Officer, Birtchall, Llangeifal. Closing date April 8.

**Ysgol John Bright, Llandudno**  
(Comprehensive 11 to 18; 1,390 pupils)  
Required for September, 1977:

**Teacher of METALWORK**

The School is looking for a teacher who is also versed in modern techniques and crafts such as working with plastics, and who is prepared to widen the curriculum beyond the basic subjects of Metalwork. Scale 2.

Application forms from Area Education Officer, Hauf-fer, 8 Clement Avenue, Llandudno. Closing date April 8.

**Ysgol Brynrefail, Llanrug**  
(Cyfan 11 to 18; 640 o ddysgwylion)  
Yn eiddau ar gyfer Medi 1977:

- Athro/Athrawes i ddysgu SAESNEG**  
drywy' Ysgol hyd at amon T.A.U. ac i ddysgu pynciau cyffredinol megis Hanes a Daearyddiaeth i ddisbartholion ac i eu gollu, Graddfa 1.
- Athro/Athrawes**  
i ddysgu dosbarthiadau Adfer mewn pynciau cyffredinol yn y 4ed a'r 5ed Flydyddyn, Swydd dros-dra am flydyddyn. Graddfa 1.

Ffrifenni cael eiddi wyl y Cyfarwyddwr Addysg, Swyddfa Addysg, Caernarfon. Dyddiad cau Ffrif 8ed.

**TECWWYN ELLIS,**  
Cyfarwyddwr Addysg  
Director of Education.

### COUNTY SECONDARY SCHOOLS

#### SCALE 2 POSTS AND ABOVE

Unless otherwise stated, for all posts in this section, initial applications (giving age, qualifications, experience and names of two referees) should be sent immediately, together with stamped addressed envelope to Head of School.

**Small Heath School and Community Centre** (formerly Boreley Community School), Huntz Street, Birmingham  
Group 11-plus S.P.A. 6 f.e. Comprehensive 11-18 mixed. Number on roll: 1,000  
Required for September, 1977: HEAD OF ENGLISH with responsibility for developing a language policy across the curriculum. Senior Teacher. The Education and Leisure Services Committee have combined to provide in one building a new public library, swimming baths, community centre and comprehensive school. This co-operation in a common enterprise offers exciting and challenging opportunities for developing education in its widest sense. Handsworth Wood Girls' School, Church Lane B24 2HL.

**Scale 4 HEAD OF ENGLISH—** a key post in the school—required for September.

### COUNTY SECONDARY SCHOOLS

#### SCALE 1 POSTS

Unless otherwise stated, requests for application forms for Scale 1 posts should be sent direct to Head of the School as soon as possible, together with the names of two referees and a stamped addressed envelope.

**Moor End School, Moor End Lane, Erdington B24 8DR**  
Temporary Post  
Teacher of HOUSECRAFT required for next term. Opportunities for examination work in pleasant room in new building.

### COUNTY SECONDARY SCHOOLS

#### SCALE 1 POSTS

Unless otherwise stated, requests for application forms for Scale 1 posts should be sent direct to Head of the School as soon as possible, together with the names of two referees and a stamped addressed envelope.

**Moor End School, Moor End Lane, Erdington B24 8DR**  
Temporary Post  
Teacher of HOUSECRAFT required for next term. Opportunities for examination work in pleasant room in new building.

**BIRMINGHAM CITY COUNCIL**















Metropolitan Borough of Rochdale

EDUCATION DEPARTMENT

HEADSHIP (Group 85)

High Birch Special (ESN) (M) School

Applications are invited from suitably qualified and experienced teachers for the above post. This mixed all age E.S.N. day school has approximately 190 on roll. The appointment will be from September, 1977.

Requests for application forms and further details (please enclose a foolscap stamped addressed envelope) should be made to the Chief Education Officer, Education Department, Municipal Buildings, Manchester Old Road, Middleton, Manchester M24 4EA, to whom they should be returned by 4th April, 1977.

Metropolitan Borough of Rochdale

EDUCATION DEPARTMENT SPECIAL EDUCATION

Alderman Kay Day E.S.N. (All Age) Mixed; Thimern Rd., Middleton M24 3JG Tel. 081-643 4917

Deputy Head Teacher

Group 8 (S)

Required for September, 1977. The school has places for 180 children.

Present holder promoted to Headship.

Application forms (please enclose a foolscap stamped addressed envelope), are available from the Chief Education Officer, Education Department, Municipal Buildings, Middleton, Manchester, M24 4EA and returned to the Head of the school on completion. Closing date Monday, April 11, 1977.

London Borough of Wandsworth

THE ROYAL PINLANTHROPIC, REDHILL, SURREY

The above is a complex of three separate establishments on the same campus, including a Community Home (70 boys) a Regional Assessment Centre (52 boys) and an Intensive Care Unit (28 boys).

DEPUTY HEAD

Upon retirement, the above post in the INTENSIVE CARE UNIT will become vacant on 1st July, 1977.

Applicants should be suitably qualified and experienced in residential work, preferably including the therapeutic care and treatment of some highly disturbed boys within secure facilities.

The Unit is housed in purpose-built premises with excellent facilities and generous staffing.

Accommodation: A modern 3-bedroom house with separate garage is available in an excellent position at an inclusive rental of £235.00 p.a.

Application forms and further particulars (n.a.s. please) from the Principals.

Closing date: Two weeks from date of advertisement.

NORFOLK COUNTY COUNCIL Education Department

Sidestrand Hall Residential E.S.N. (M) School Sidestrand, Nr. Cromer, Norfolk. Headmaster, Mr J. Davison

Resident Deputy Head

required at this residential E.S.N. (M) School for 75 pupils. Applicants must have completed an appropriate supplementary course for handicapped pupils and should have experience in boarding Special Schools. Salary Scale Group 6 (S) plus £920 per annum extraneous duties allowance. Three-bedroom Flat available.

Application forms and further particulars, obtainable from the County Education Officer, Martineau Lane, Norwich NR1 2DL, will be sent only on receipt of a stamped addressed envelope.

SPECIAL EDUCATION Headships continued

WHAN Education Officer, Special Education, Municipal Buildings, Manchester Old Road, Middleton, Manchester M24 4EA. Tel. 081-643 4917. Closing date: 11th April 1977.

Deputy Headships Senior Masters/Mistresses

HOUNSLOW Education Officer, Special Education, Municipal Buildings, Manchester Old Road, Middleton, Manchester M24 4EA. Tel. 081-643 4917. Closing date: 11th April 1977.

Metropolitan Borough of Rochdale

EDUCATION DEPARTMENT SPECIAL EDUCATION

Alderman Kay Day E.S.N. (All Age) Mixed; Thimern Rd., Middleton M24 3JG Tel. 081-643 4917

Deputy Head Teacher

Group 8 (S)

Required for September, 1977. The school has places for 180 children.

Present holder promoted to Headship.

Application forms (please enclose a foolscap stamped addressed envelope), are available from the Chief Education Officer, Education Department, Municipal Buildings, Middleton, Manchester, M24 4EA and returned to the Head of the school on completion. Closing date Monday, April 11, 1977.

London Borough of Wandsworth

THE ROYAL PINLANTHROPIC, REDHILL, SURREY

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Closing date: Two weeks from date of advertisement.

NORFOLK COUNTY COUNCIL Education Department

Sidestrand Hall Residential E.S.N. (M) School Sidestrand, Nr. Cromer, Norfolk. Headmaster, Mr J. Davison

Resident Deputy Head

required at this residential E.S.N. (M) School for 75 pupils. Applicants must have completed an appropriate supplementary course for handicapped pupils and should have experience in boarding Special Schools. Salary Scale Group 6 (S) plus £920 per annum extraneous duties allowance. Three-bedroom Flat available.

Application forms and further particulars, obtainable from the County Education Officer, Martineau Lane, Norwich NR1 2DL, will be sent only on receipt of a stamped addressed envelope.

DEVON WEST DEVON AREA ADVISORY TEACHERS

Applications are invited from suitably qualified and experienced T.A.s. for the post of ADVISORY TEACHER for the following areas: (a) Devon (b) West Devon.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Devon County Council, Devon House, 100 North Street, Exeter, Devon EX1 1JW, to whom they should be returned by 11th April 1977.

DORSET APPOINTMENT OF TEACHER OF THE DEAF

For the post of TEACHER OF THE DEAF at the HEARING IMPAIRED CHILDREN SYLVAN ROAD SCHOOL.

A vacancy exists at this school in the post of TEACHER OF THE DEAF. The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Dorset County Council, Dorset House, 100 North Street, Dorchester, Dorset DT1 1JW, to whom they should be returned by 11th April 1977.

EALING Education Officer, Special Education, Municipal Buildings, Manchester Old Road, Middleton, Manchester M24 4EA. Tel. 081-643 4917. Closing date: 11th April 1977.

ST. HELENS Education Officer, Special Education, Municipal Buildings, Manchester Old Road, Middleton, Manchester M24 4EA. Tel. 081-643 4917. Closing date: 11th April 1977.

DEPUTY HEAD TEACHER

Group 8 (S)

Required for September, 1977. The school has places for 180 children.

Present holder promoted to Headship.

Application forms (please enclose a foolscap stamped addressed envelope), are available from the Chief Education Officer, Education Department, Municipal Buildings, Middleton, Manchester, M24 4EA and returned to the Head of the school on completion. Closing date Monday, April 11, 1977.

London Borough of Wandsworth

THE ROYAL PINLANTHROPIC, REDHILL, SURREY

The above is a complex of three separate establishments on the same campus, including a Community Home (70 boys) a Regional Assessment Centre (52 boys) and an Intensive Care Unit (28 boys).

DEPUTY HEAD

Upon retirement, the above post in the INTENSIVE CARE UNIT will become vacant on 1st July, 1977.

Applicants should be suitably qualified and experienced in residential work, preferably including the therapeutic care and treatment of some highly disturbed boys within secure facilities.

The Unit is housed in purpose-built premises with excellent facilities and generous staffing.

Accommodation: A modern 3-bedroom house with separate garage is available in an excellent position at an inclusive rental of £235.00 p.a.

Application forms and further particulars (n.a.s. please) from the Principals.

Closing date: Two weeks from date of advertisement.

NORFOLK COUNTY COUNCIL Education Department

Sidestrand Hall Residential E.S.N. (M) School Sidestrand, Nr. Cromer, Norfolk. Headmaster, Mr J. Davison

Resident Deputy Head

required at this residential E.S.N. (M) School for 75 pupils. Applicants must have completed an appropriate supplementary course for handicapped pupils and should have experience in boarding Special Schools. Salary Scale Group 6 (S) plus £920 per annum extraneous duties allowance. Three-bedroom Flat available.

Application forms and further particulars, obtainable from the County Education Officer, Martineau Lane, Norwich NR1 2DL, will be sent only on receipt of a stamped addressed envelope.

LEICESTERSHIRE MANORHOOD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Leicestershire (b) North Leicestershire.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Leicestershire County Council, Leicestershire House, 100 North Street, Leicester, Leicestershire LE1 1JW, to whom they should be returned by 11th April 1977.

LINCOLNSHIRE SENIOR PERI-METRIC HEMODIALYSIS COUNTY REMEDIAL SERVICES

For the post of SENIOR PERI-METRIC HEMODIALYSIS COUNTY REMEDIAL SERVICES.

A vacancy exists at this school in the post of SENIOR PERI-METRIC HEMODIALYSIS COUNTY REMEDIAL SERVICES. The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Lincolnshire County Council, Lincolnshire House, 100 North Street, Lincoln, Lincolnshire LN1 1JW, to whom they should be returned by 11th April 1977.

NORTH YORKSHIRE COUNTY OF NORTH YORKSHIRE COUNTY SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) North Yorkshire (b) North Yorkshire.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, North Yorkshire County Council, North Yorkshire House, 100 North Street, North Yorkshire YO1 1JW, to whom they should be returned by 11th April 1977.

NORTH YORKSHIRE COUNTY OF NORTH YORKSHIRE COUNTY SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) North Yorkshire (b) North Yorkshire.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, North Yorkshire County Council, North Yorkshire House, 100 North Street, North Yorkshire YO1 1JW, to whom they should be returned by 11th April 1977.

EAST SUSSEX COUNTY COUNCIL

For the post of ASSISTANT TEACHER for the following areas: (a) East Sussex (b) East Sussex.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, East Sussex County Council, East Sussex House, 100 North Street, East Sussex TN1 1JW, to whom they should be returned by 11th April 1977.

KENT COUNTY COUNCIL

For the post of ASSISTANT TEACHER for the following areas: (a) Kent (b) Kent.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Kent County Council, Kent House, 100 North Street, Kent ME1 1JW, to whom they should be returned by 11th April 1977.

LANCASTER WINNINGTON HALL SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Lancashire (b) Lancashire.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

ROYAL SOCIETY FOR DEAF CHILDREN

For the post of ASSISTANT TEACHER for the following areas: (a) Royal Society for Deaf Children (b) Royal Society for Deaf Children.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Royal Society for Deaf Children, Royal Society House, 100 North Street, London, to whom they should be returned by 11th April 1977.

SANDWELL METROPOLITAN BOROUGH

For the post of ASSISTANT TEACHER for the following areas: (a) Sandwell (b) Sandwell.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Sandwell Metropolitan Borough Council, Sandwell House, 100 North Street, Sandwell, to whom they should be returned by 11th April 1977.

WILTSHIRE HARTFORDSHIRE CHILDREN'S HOSPITAL

For the post of ASSISTANT TEACHER for the following areas: (a) Wiltshire (b) Wiltshire.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Wiltshire County Council, Wiltshire House, 100 North Street, Wiltshire, to whom they should be returned by 11th April 1977.

DEVON DEVON AND EXETER SPARTAN

For the post of ASSISTANT TEACHER for the following areas: (a) Devon (b) Devon.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Devon County Council, Devon House, 100 North Street, Devon, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

SPECIAL EDUCATION Scale 2 Posts

Applications are invited from suitably qualified and experienced teachers for the following posts: (a) Special Education (b) Special Education.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Special Education, Special Education House, 100 North Street, London, to whom they should be returned by 11th April 1977.

CUMBRIA

For the post of ASSISTANT TEACHER for the following areas: (a) Cumbria (b) Cumbria.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Cumbria County Council, Cumbria House, 100 North Street, Cumbria, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

The appointment will be made on a fixed term, three-year basis, and the post will be graded at Scale 2.

Application forms and details (please enclose a foolscap stamped addressed envelope) should be sent to the Education Officer, Debenham Road School, Debenham Road, Debenham, to whom they should be returned by 11th April 1977.

DEBENHAM ROAD SCHOOL

For the post of ASSISTANT TEACHER for the following areas: (a) Debenham Road School (b) Debenham Road School.

Applicants must have experience of working with young handicapped children.

The successful candidate will be required to provide advisory services to schools in the area and also to act as a resource for the area.

WILTSHIRE HARTFORDSHIRE CHILDREN'S HOSPITAL

For the post of ASSISTANT TEACHER for the following areas: (a) Wiltshire (b) Wiltshire.

Applicants must have experience











**EDUCATION DEPARTMENT**  
**MONKWEARMOOUTH COLLEGE OF FURTHER EDUCATION**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER Grade II in charge of Office Systems & Procedures**  
 Applicants should hold an appropriate degree or professional qualification. Relevant business experience essential.

**LECTURER Grade II in Home Economics**  
 Applicants should hold the Home Economics Teacher's Certificate or equivalent qualification. Specialist subject Needlework/Dressmaking.

**LECTURER Grade I in Secretarial Studies**  
 Applicants should hold the R.S.A. Teacher's Certificate in Shorthand and Typewriting. Suitable business experience essential.

**LECTURER Grade I in Sociology**  
 Applicants should possess a degree in Sociology or Sociology and related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Monkwearmouth College of Further Education, Swan Street, Sunderland SR5 1EB. Closing date for applications: 15th April, 1977. L. A. BLOOM, Chief Executive.

**Borough of Sunderland**

**Ipswich Civic College**  
 The following temporary post is available from 1 September, 1977, to 31 August, 1978, to cover the secondment of the permanent post holder.

**LECTURER GRADE II (TEMPORARY)—BUILDING SUBJECTS**  
 To teach general building subjects to Technician Courses. A professional qualification in Architecture, Building or Surveying is essential. Some teaching experience would be an advantage.  
 Salary will be at a point within the following limits: £3,279 to £5,493, plus £312 supplement.  
 For further details and application form please send stamped and addressed envelope to the Principal, Ipswich Civic College, Rope Walk, Ipswich IP4 1LT, to whom completed application forms should be returned within 14 days of this advertisement. Please quote post number 471X.

**Brixton College for Further Education**  
 56 Brixton Hill, SW2 1QS

Required for September, 1977, in the Department for General Education—

**Lecturer 1**  
 TO TEACH MATHEMATICS  
 up to and including GCE "O" level. An interest in teaching lower-attaining students is essential (reference G75).

**Lecturer 1**  
 TO TEACH GENERAL AND SOCIAL STUDIES  
 including SOCIOLOGY at GCE "O" level. Experience of CSE Social Studies work an advantage (reference G76).

**Two Lecturers Grade 1**  
 full-time appointments on an established NNEB course—

- A qualified, experienced, Nursery/Infant Teacher to teach CHILD EDUCATION and all aspects of intellectual and emotional development of the child 0 to 7 years (reference G77).
- A State-Registered Nurse with a Health Visitor Certificate or Teaching qualification to teach CHILD HEALTH and PHYSICAL DEVELOPMENT (reference G78).

Candidates should also be prepared to undertake the teaching of these subjects to other groups within the Department, e.g. students on PRC, General Education and other courses. Salary scale: £2,469 to £4,377 (plus £312 supplement and £402 Inner London allowance), starting point depending on qualifications, training and experience.

Application forms available from the Applications Secretary on receipt of S.A.E. (quoting appropriate ref.) returnable by 15 April, 1977.

**COLLEGES OF FURTHER EDUCATION continued**

**GWENT COUNTY COUNCIL**  
 EDUCATION DEPARTMENT  
 Acquired for 1st September, 1977:  
**TECHNOLOGY COLLEGE OF FURTHER EDUCATION**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in ECONOMICS and COMMERCIAL STUDIES**  
 Applicants should hold an appropriate degree or professional qualification. Relevant business experience essential.

**LECTURER I in CATERING SUBJECTS**  
 Applicants should possess an appropriate degree or professional qualification. Relevant business experience essential.

**LECTURER Grade II in Home Economics**  
 Applicants should hold the Home Economics Teacher's Certificate or equivalent qualification. Specialist subject Needlework/Dressmaking.

**LECTURER Grade I in Secretarial Studies**  
 Applicants should hold the R.S.A. Teacher's Certificate in Shorthand and Typewriting. Suitable business experience essential.

**LECTURER Grade I in Sociology**  
 Applicants should possess a degree in Sociology or Sociology and related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Monkwearmouth College of Further Education, Swan Street, Sunderland SR5 1EB. Closing date for applications: 15th April, 1977. L. A. BLOOM, Chief Executive.

**HAMPSHIRE EASTLEIGH TECHNICAL COLLEGE**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Eastleigh Technical College, Eastleigh, Hampshire. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Eastleigh Technical College, Eastleigh, Hampshire. Closing date for applications: 15th April, 1977.

**HERTFORDSHIRE COUNTY COUNCIL**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Hertfordshire County Council, Hertford. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Hertfordshire County Council, Hertford. Closing date for applications: 15th April, 1977.

**SURREY COUNTY COUNCIL**  
**GUILDFORD COUNTY COLLEGE OF TECHNOLOGY**  
 Stoke Park Guildford Surrey

Appointments will be from September 1, 1977.

**DEPARTMENT OF BUILDING AND SURVEYING**  
**SENIOR LECTURER**  
 to teach Building Management subjects to the level of the Institute of Building Final Examination Part II.

**LECTURER, GRADE I**  
 (1) to teach general building subjects to students on Ordinary National Diploma and Technician Education Council Certificate and Diploma Courses  
 (2) to teach Plumbing workshop practice and theory to the level of the City and Guilds Advanced Craft Certificate examination.

**DEPARTMENT OF COMMERCE**  
**LECTURER, GRADE I**  
 (1) to teach Law on Business Studies courses;  
 (2) to teach Accounting and Business Organisation on Business Studies courses;  
 (3) to teach Typewriting, Pitman's Shorthand and Secretarial Duties.

**DEPARTMENT OF ENGINEERING**  
**LECTURER, GRADE I**  
 to teach, together with two other lecturers, General Studies to the full range of courses in this large department.

**DEPARTMENT OF SCIENCE AND ELECTROTECHNOLOGY**  
**LECTURER, GRADE I**  
 to teach Electrical Installation work, theory and practice, to students following City and Guilds Courses A, B and D.

**DEPARTMENT OF SOCIAL WORK STUDIES**  
**LECTURER, GRADE II**  
 to teach on, and be Tutor to the Pre-Nursing and Dipoma Courses.  
 Salary Scales: Senior Lecturer £5,493-£8,417/£8,879; Lecturer, Grade II, £3,741-£5,855; Lecturer, Grade I, £2,931-£4,839.  
 Further particulars and application form available from the Principal on receipt of S.A.E. Application forms should be returned as soon as possible.

**LEICESTER COUNTY COUNCIL**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER II in HUMAN BIOLOGY AND APPLIED SCIENCE**  
 Applicants should possess a degree in Human Biology or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Leicester County Council, Leicester. Closing date for applications: 15th April, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Leicester County Council, Leicester. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Leicester County Council, Leicester. Closing date for applications: 15th April, 1977.

**STATES OF JERSEY**  
**EDUCATION COMMITTEE**  
**Highlands College**

The following new posts will be available from September 1, 1977, in this expanding College of Further Education

**HEAD OF DEPARTMENT (Grade II)**  
 To take charge of a new Department of General Studies responsible for Languages, Computing, etc., and a full Adult Education programme.

**LECTURER I in GENERAL STUDIES**  
**LECTURER II in BUSINESS STUDIES**  
 Particularly for Cost and Management Accounting.

**LECTURER I in OFFICE ARTS**  
**LECTURER I in CATERING**  
 Qualified to teach Professional Cookery up to O.N.D. level and to City and Guilds courses.

Salaries in accordance with Burnham F.E. Scales.  
 Application forms and further particulars from the Principal, Highlands College, St. Saviour, Jersey C.I. (Tel. (0534) 71085, extension 303.)

**Ipswich Civic College**  
 The following posts are available from 1 September, 1977.

**LECTURER GRADE II**  
 (three posts)  
 Post No. 4/18 Secretarial Studies  
 Post No. 4/13 Data Processing  
 teaching to include systems analysis, programming and data processing at levels up to HND Business Studies.  
 Post No. 4/20 Management Development  
 Knowledge of personnel management and experience in public sector required.

**LECTURER GRADE I**  
 (six posts)  
 Post No. 5/37 Secretarial Studies  
 Post No. 5/48 Brickwork and associated subjects  
 Post No. 5/50 Food Production  
 Teaching to include CGLI 107 & 708.  
 Post No. 5/44 Food Service  
 Teaching to include OND and CGLI 705 & 707  
 Post No. 5/51 Hairdressing and Wigmaking  
 Teaching to include CGLI 780/1 & 760/3  
 Post No. 5/59 Automobile Engineering  
 Teaching to include CGLI 380, 381 and 390.  
 Salary: Lecturer II £3,279 to £5,493 plus £312 supplement.  
 Lecturer I £2,469 to £4,377 plus £312 supplement.

For further details and application form please send stamped and addressed envelope to The Principal, Ipswich Civic College, Rope Walk, Ipswich IP4 1LT, to whom completed application forms should be returned within 14 days of this advertisement. Please quote the post number.

**COLLEGES OF FURTHER EDUCATION continued**

**LONDON**  
**INNER LONDON EDUCATION AUTHORITY**  
**LONDON COLLEGE OF PRINTING**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LEICESTER COUNTY COUNCIL**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Leicester County Council, Leicester. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Leicester County Council, Leicester. Closing date for applications: 15th April, 1977.

**Every Friday go into your local newsagent, smile, produce 15p and ask for a copy of The Times Educational Supplement.**

**This is how to avoid argument, injury and be the first to read the TES.**

**QED**

**THE TIMES Educational Supplement**

**LONDON**  
**INNER LONDON EDUCATION AUTHORITY**  
**LONDON COLLEGE OF PRINTING**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LONDON**  
**INNER LONDON EDUCATION AUTHORITY**  
**LONDON COLLEGE OF PRINTING**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LONDON**  
**INNER LONDON EDUCATION AUTHORITY**  
**LONDON COLLEGE OF PRINTING**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, London College of Printing, London. Closing date for applications: 15th April, 1977.

**SANDWICH**  
**COLLEGE OF FURTHER EDUCATION**  
 Applications are invited for the following posts. Qualified teacher status and previous teaching experience would be preferred for all the following posts. Duties are to commence on 1st September, 1977.

**LECTURER I in GENERAL STUDIES**  
 Applicants should possess a degree in General Studies or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Sandwich College of Further Education, Sandwich. Closing date for applications: 15th April, 1977.

**LECTURER I in CHILD HEALTH**  
 Applicants should possess a degree in Child Health or related subjects. Application forms available upon receipt of a stamped, addressed envelope from the Principal, Sandwich College of Further Education, Sandwich. Closing date for applications: 15th April, 1977.

**THE OPEN UNIVERSITY**  
**RESEARCH STUDENTSHIPS**

The Open University invites applications for full-time research studentships, tenable from 1st October 1977 at Milton Keynes and the Oxford Research Unit, in the following areas:

**ARTS**  
 History of Art—Architecture and Design, History, History of Science, History of Technology, Philosophy.

**EDUCATIONAL STUDIES**  
 Administration and Management of Education, The Curriculum Area, Psychology of Education, Sociology, Information Science.

**EDUCATIONAL TECHNOLOGY**  
 Evaluation of Instructional Systems, Media Research.

**ENERGY RESEARCH**  
 Energy and Materials Resources, World Energy Use, Resource Modelling, Alternative Technology, Resource Use in Transport, Energy Use in Housing.

**MATHEMATICS**  
 Pure Mathematics—Graph theory; mathematical logic (model theory); geometry; topology; Mathematical Physics—Applications of differential geometry and group representations; atomic and molecular scattering; statistical mechanics. Computers—particularly information systems, data bases and methods of learning by doing. History of Mathematics, Statistics, Mathematics Education, Numerical Analysis.

**OXFORD RESEARCH UNIT**  
 Biophysics of muscle and oemra, Diffusion, Irreversible processes in solids, Low temperature solid state physics, Surface studies of polymers, Community participation in art; design, Comparative blood sugar regulation, Structure and sensitivity of systems models.

**SCIENCE**  
 Biology—Biochemistry, Neurobiology, Freshwater Biology, Physiology of cold-blooded vertebrates; Plant Physiology, Chemistry—Bioinorganic Chemistry, Rare Earths, Organic Synthesis; Prebiotic Chemistry; NMR Spectroscopy; Gas Phase Kinetics; Organosilicon Chemistry, Earth Sciences—Geology; Geochemistry and Petrogenesis of igneous rocks; Palaeogeology; Earth Sciences Education.

**SOCIAL SCIENCES**  
 Applied Historical Studies—Historical Sociology, Demography, Psychology, Human Geography, New Towns and Urban Development, Cognitive and Social Psychology, Sociology, Social Administration and Social Work.

**SOCIAL SURVEY RESEARCH**  
 Research in Higher and Adult Education, Survey Research Methodology.

**SYSTEMS**  
 Construction and Evaluation of Social System Models, Safety Research, Models in decision making, Models of managed biological systems.

**TECHNOLOGY**  
 Alternative Technology, Air Pollution, Acoustics and Noise Control, Design—Urban Modelling, Community Participation, New Communication Systems, Automatic Speech Recognition, Digital Communications; Microprocessor applications, computer architecture; applications of ultrasonics, Materials Science—surface energy and chemical polishing studies in polymeric materials; ultrasonic measurements of elastic constants in alloys, and their correlation with physical and mechanical properties and phase stability; energy use and conservation in various materials processing industries.

Successful applicants will read for a higher degree of the Open University. Applicants should normally have (or expect to gain in July, 1977) a good honours degree. The conditions applying to the awards are similar to those for studentships of the Research Councils. Further particulars and application forms may be obtained from The Higher Degree Office (UP3), The Open University, PO Box 48, Walton Hall, Milton Keynes MK7 6AD. Please specify the area(s) in which you are interested and quote reference UP. The closing date for receipt of applications is 14th April, 1977.







**WIRRAL**  
Metropolitan Borough of

**DEPUTY LEADER**  
£2,712-£3,537 + £312

**MORETON YOUTH AND COMMUNITY CENTRE**

Qualified person to work in a purpose built Youth Centre highly involved in the life of the community.

Application forms and further details from the Director of Education, Municipal Offices, Cleveland Street, Birkenhead, Merseyside, returnable by April 8.

City of Manchester Education Committee  
**ARNFIELD TOWER FIELD STUDY CENTRE**  
Tintwistle

Appointment of  
**WARDEN**

Applications are invited from qualified teachers for the post of Warden at Arnfield Tower Junior Field Study Centre, to commence September 1, 1977, or earlier.

The Centre will cater predominantly for Junior children but also for younger secondary children up to age 14 in a broadly based curriculum of environmental studies. The Warden will be expected to develop the educational potential of the Centre, direct and co-ordinate the work of staff and advise and assist parties visiting the Centre and surrounding area.

Salary in accordance with Burnham Primary and Secondary Scale II, £3,888 to £5,228.

Accommodation may be available for a single person.

Application form and further particulars are available from the Chief Education Officer, Community Education Branch, Crown Square, Manchester M60 3BB, to whom they should be returned by April 15, 1977.

Recreation and Amenities Department  
**Play Leaders**

Salary Grade M.5/7 £2,649-£3,207 per annum inclusive plus £312 Supplement.

Needed to organise the running of two established Sports/games oriented Play Schemes.

Experience in sporting activities involving children in an informal setting an advantage, but a keen desire to work with children is essential. 38 hour, 5 day week, on a rota basis covering the following hours—12 noon to 8.00 p.m. Monday to Friday and 10.00 a.m. to 8.00 p.m. Saturday and Sunday. Enhanced rates payable for weekend and irregular hours. 23 days holiday. Housing accommodation may be available with one of these posts.

Application form and Job Description from Personnel Officer, Town Hall, Forest Road, London E17 4JF. (Tel: 01-531 8899—24 hour answering service in operation). Closing date: 12th April, 1977. Please quote ref: C244

London Borough of  
**Waltham Forest**

**Leicestershire**

**HEAD OF CENTRE FOR EDUCATIONAL TECHNOLOGY**

Required September to fill vacancy caused by retirement.

Applicants should be qualified teachers.

Salary Burnham Scale 3 or 4 according to experience.

Details on request (stamped addressed envelope).

Apply (no forms) giving full details and names and addresses of two referees to the Director of Education, County Hall, Glenfield, Leicester LE3 8RP, by April 8.

**ADULT EDUCATION Appointments continued**

**LONDON**

**SYDENHAM AND LOUISIE HILL ADULT EDUCATION**  
Kingsdale School, Ashpitel Park, Sydenham, London SE13 5JL

**LECTURER IN ART, LASHION AND CRAFTS**  
This new post involves responsibility for planning and supervising fashion and craft courses throughout the Institute and also for the local community. The Institute has an excellent staff of experienced teachers and a well equipped studio. The Institute also offers evening classes in fashion design and craft for hand-icapped and elderly people. The Lecturer will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**Other Appointments**

**BRADFORD CITY OF EDUCATION**  
BRADFORD HOUSE COMMUNITY CENTRE  
Bradford House, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**Assessment Centres**

**WIGAN**  
Metropolitan Borough of Wigan, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**Community Homes and Associated Institutions**

**Headships and Deputy Headships**

**BRADFORD CITY OF EDUCATION**  
BRADFORD HOUSE COMMUNITY CENTRE  
Bradford House, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**CHAWORTH SCHOOL, OTTERSHAW, CHERTSEY, SURREY KT16 0LS**

**FULL TIME TEACHER OF GENERAL SUBJECTS**

Applications are invited for the above post at this Community Home with Education on the premises. The post involves the teaching of a maximum of 22 girls whose problems include emotional stress and educational and social malfunctioning. The post will offer great scope for small group and individual teaching, in a team comprising three full-time teachers with part-time support.

Salary will be based on Scale 1 of the Burnham Scale, plus £264 C.H.E. Allowance, plus £141 Surrey Waltham allowance, plus an allowance for extraneous duties if undertaken.

There is a possibility of some accommodation, and the holidays consist of 8 weeks annual leave.

Application forms and further details are available from the Principal, Mr. Brian Rushworth at the school and telephone enquiries or visits would be welcome. Telephone: Ottershaw 2208 and 2809.

**London Borough of Camden Social Services Department**

**YOUTH AND COMMUNITY SERVICE**

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

THE TIMES EDUCATIONAL SUPPLEMENT 25.3.77

**COUNTY OF AVON Social Services Department**

**TEACHER OF PHYSICAL EDUCATION**

At National Nautical School, Nore Road, Portlehead, Avon, BS20 8BU, a Senior Community School for Boys with an age range of 14 to 17 years. Salary scale: Burnham 1 £2,253-£3,744. Plus £284 Approved Schools Allowance, £280 pa. Extraneous Duty Allowance and £312 p.a. Supplement.

Post vacant 13th April, 1977.

Qualification and interest in out-door activities an advantage. Post involves some general subject in classroom teaching.

In the first instance please contact Mr. J. Hague (Second Deputy), during school hours (Tel: Portlehead 843116).

Further details and application form returnable immediately from Director of Personnel (Tel: Bristol 298585), Avon House, The Haymarket, Bristol, BS99 7DE.

Please quote ref. no.: SS 8980.

**EDUCATION DEPARTMENT**

**INFORMAL EDUCATION TUTOR**  
(Burnham Scale 4)

Required at Castle View School—a qualified teacher experienced in youth, community and adult education work. The Tutor will be responsible for implementing the education committee's community education policy in this eight form entry comprehensive school, co-ordinating and programming all use of school premises after school hours. He or she will also act as a catalyst in stimulating community involvement for the benefit of the neighbourhood. A wide range of youth/community and adult education activities already exist in the school.

The Tutor will be a member of the school staff responsible to the Head and the appropriate officers of the Authority.

Application forms, which must be returned not later than 8th April, and further details may be obtained from the Director of Education, at the address shown below.

Town Hall and Civic Centre, L. A. Bloom, Chief Executive, Sunderland S12 7DR.

**Borough of Sunderland**

**LEADER OF EDUCATION DEPARTMENT**

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**UNIVERSITY OF MALAWI THE POLYTECHNIC Principal**

A constituent College of the University of Malawi, situated between Blantyre and Limba, the Polytechnic caters for approximately 900 day and 1,400 evening class students. It offers 3 year full-time post School Certificate University Diploma courses in Mechanical, Electrical and Construction Engineering, Public Health Inspection, Laboratory Technology and Business Studies and a variety of full-time block release and sandwich courses at craft and technician level under separate Board of Governors. The extension of the work in Engineering and Accountancy to ordinary degree level is now being considered.

Applications are invited for the post of Principal. Candidates should have appropriate academic qualifications, substantial teaching and administrative experience and breadth of interests appropriate to the range of the Polytechnic's work. The post will carry professional status and salary and an ex-officio seat on the Senate.

Salary, £8,110 to £9,735 p.a. (including a supplement, normally tax-free, payable by the British Government to citizens of the U.K. which is reviewed annually).

Appointment on contract to the University for two years initially, 15-25 per cent terminal gratuity, subsidised housing, free passages, education allowance and children's holiday visit passages, biennial overseas leave. An interest-free car loan of £1,200 and appointments grant of £300 are payable in certain circumstances.

Please write for further details and an application form to Recruitment Unit, TETOC (Technical Education and Training Organisation for Overseas Countries), 35/37 Grosvenor Gardens, London SW1W 0BB. Closing date for receipt of applications 19th April, 1977.

THE TIMES EDUCATIONAL SUPPLEMENT 25.3.77

**YOUTH AND COMMUNITY SERVICE**

**DEVON**  
Metropolitan Borough of Devon, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**LANCASHIRE**  
Metropolitan Borough of Lancashire, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

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Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**LONDON**

**EDUCATION DEPARTMENT**

**YOUTH TUTOR**

Required at Castle View School—a qualified teacher experienced in youth, community and adult education work. The Tutor will be responsible for implementing the education committee's community education policy in this eight form entry comprehensive school, co-ordinating and programming all use of school premises after school hours. He or she will also act as a catalyst in stimulating community involvement for the benefit of the neighbourhood. A wide range of youth/community and adult education activities already exist in the school.

The Tutor will be a member of the school staff responsible to the Head and the appropriate officers of the Authority.

Application forms, which must be returned not later than 8th April, and further details may be obtained from the Director of Education, at the address shown below.

Town Hall and Civic Centre, L. A. Bloom, Chief Executive, Sunderland S12 7DR.

**BATHAMAS**  
Metropolitan Borough of Bathamas, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

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Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

THE TIMES EDUCATIONAL SUPPLEMENT 25.3.77

**OXFORDSHIRE**  
Metropolitan Borough of Oxfordshire, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**WIGAN**  
Metropolitan Borough of Wigan, Social Services Department, Assessment Centres, 100, Westbury Road, Waltham Forest, London E12 6JF

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

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**OVERSEAS Appointments**

**TEACHING ENGLISH ABROAD**

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

Assistance may be given towards household removal expenses.

Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**THE BRITISH COUNCIL**

**PRIMARY/JUNIOR SECONDARY TEACHERS (Tanzania)**  
International School, Dar es Salaam.

Applications are invited from men and women for the post of Lecturer in Physical Education. The successful applicant will be responsible for planning and supervising physical education courses for boys in the age range 11 to 17 years. The successful applicant will be responsible for general administration duties and some teaching, with responsibility for in-service training within the Department.

The Lecturer will be required to give imaginative and creative ideas in developing the Institute's programmes and to be responsible for the in-service training of staff. The Lecturer will also be responsible for the general administration of the Institute.

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Salary range in accordance with London Allowance Scale 3, £3,200 to £4,000 per annum. Applications should be sent to the Director of Education, Metropolitan Borough of Waltham Forest, 100, Westbury Road, Waltham Forest, London E12 6JF, by April 8, 1977.

**MOROCCO**

The Centre for British Teachers, at the request of the Government of the Kingdom of Morocco, is expanding its successful English Language Teaching scheme in Moroccan lycées by recruiting a further 80 British teachers for the coming academic year.

- Contracts are from September 1 1977 for two years, but may be terminated in the first year.
- Contracts are renewable.
- Salary (currently under review) is not less than £320 per month free of tax (paid in Dirhams).
- Fares paid to and from Morocco.
- Good medical cover.
- Centre welfare and resettlement advice service.
- In-Service training and opportunities for materials writing.

Qualified graduate teachers with at least two years' experience teaching English to foreigners and with a good knowledge of spoken French. Apply to:

The Centre for British Teachers (M/TE 1)  
Quality House,  
Chancery Lane,  
London WC2A 1HP.  
Telephone 01-242 2982.

**OVERSEAS TEACHING POSTS**

**HEAD, EDUCATIONAL TECHNOLOGY SERVICES (Iran)**  
Jahid Shapur University, Ahwaz  
To establish, organise and manage new department; to run postgraduate courses initially, later undergraduate and technician courses.  
PhD or MSc and at least 5 years' relevant experience.  
Salary £10,750-£19,700 pa (approximately).  
Benefits: Housing allowance; one year contract, renewable. 77 HU 18

**LECTURER IN ENGLISH (Egypt)**  
Moharem Bey Technical School, Alexandria  
Degree in English or Modern Languages and 1-year postgraduate TEFL/Applied Linguistics qualification; 5 years' experience including teacher training and secondary/technical work in ESP.  
Salary: in excess of candidate's current UK employment.  
Benefits: free furnished accommodation; overseas and children's allowances.  
Three year contract with the Ministry of Overseas Development. 76 AS 119

**LECTURER/TEACHERS OF ENGLISH (Iran)**  
Irano-British Ship Management Co., Abadan  
Lecturer, Senior Teacher and Teacher required to prepare ESP materials and/or teach general and technical English to FCE level to naval cadets and ratings.  
Lecturer: Degree/teacher's certificate; 1-year postgraduate TEFL qualification; 8 years' TEFL experience including 2 years' specialised ESP.  
Senior Teacher/Teacher: Degree/teacher's certificate and 3 years' relevant experience essential. 1-year postgraduate TEFL qualification essential for Senior Teacher, desirable for Teacher. Experience of materials preparation and ESP desirable.  
Salary: Lecturer £5,210-£6,028 p.a. Senior Teacher £4,588-£5,618 p.a. Teacher £3,732-£4,374 p.a.  
Benefits: Abadan allowances; free furnished accommodation; employer's portion of UK superannuation. Two year contract with the British Council. 77 HO 32-34

**PRIMARY/JUNIOR SECONDARY TEACHERS (Tanzania)**  
International School, Dar es Salaam.  
Return fares are paid. Local contract is guaranteed by the British Council. Please write, briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post for further details and an application form to The British Council (Appointments); 65 Davies Street, London W1Y 2AA.



Frankfurt English Study Centre

TEACHERS OF ENGLISH

are required by this Centre, whose aims are to provide high quality English language courses to commerce and industry in Germany.

Qualifications

A University degree in English or foreign languages, and a postgraduate certificate in the teaching of English as a foreign language or relevant teaching in this field. A working knowledge of German is essential. Preference will be given to candidates with experience in the use of audiovisual aids or in the development of teaching materials.

Conditions of Service

Contracts for one or two years, beginning September 1, 1977. Good salary free of income tax. Fares paid from and to residence in UK. Four weeks' holiday per year and vacation between Christmas and New Year.

Further information and application forms from: English Study Centre GmbH, Mainuferstrasse 2, 6000 Frankfurt, West Germany.

OVERSEAS Appointments continued

TURKEY

THE TURKISH EDUCATION SYSTEM... The Ministry of National Education... The Ministry of National Education... The Ministry of National Education...

For the Ministry of National Education... The Ministry of National Education... The Ministry of National Education...

For the Ministry of National Education... The Ministry of National Education... The Ministry of National Education...

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WEST GERMANY

International English... The Ministry of Education... The Ministry of Education... The Ministry of Education...

FINLAND

Director of Studies... We are looking for a D.S. with several years' experience in the field of English teaching... We are looking for a D.S. with several years' experience in the field of English teaching...

NEW ZEALAND

Director of Studies... We are looking for a D.S. with several years' experience in the field of English teaching... We are looking for a D.S. with several years' experience in the field of English teaching...

Technical teaching in Fiji. DERRICK TECHNICAL INSTITUTE. Map of Fiji showing Viti Levu, Suva, and other islands.

Fiji comprises some 300 islands of which about 100 are inhabited. The official language is English. The Derrick Technical Institute is located at Suva, the capital city and principal port on the main island of Viti Levu.

SENIOR LECTURER IN MECHANICAL ENGINEERING. To teach Mechanical Engineering for technician and trade courses and to assist Head of School of Engineering with further development of courses.

LECTURER IN ELECTRONICS/TELECOMMUNICATIONS. To teach Electronics/Telecommunications for technician and trade courses and to assist with further development of courses.

LECTURER IN ELECTRICAL ENGINEERING (UTILISATION). To teach Electrical Engineering for technician, diploma and trade courses, to assist with further development of courses to higher technician level.

LECTURER IN MARINE ENGINEERING. To teach Marine Engineering and allied subjects for Fiji Marine Board Certificate of Competency, CGLI Marine Engineering Technician Certificate and Advanced Certificate, pre-sea officer cadet and rating courses.

LECTURER IN BUSINESS STUDIES (ACCOUNTANCY). To teach to diploma and professional students at least three of the following subjects: Auditing, Cost Accounting, Financial Management, Financial Accounting, Commercial Law and Taxation, and to assist with administration.

LECTURER IN ARCHITECTURE. To teach to Higher Technician Certificate level 2 or more of the following subjects: Architectural Drafting, Mathematics, Surveying, Estimating and Costing, Properties of Materials, Design Procedures. Degree or equivalent qualification in Architecture essential, and at least five years' practical experience.

Salaries (reviewed quarterly) Senior Lecturer: £6,000-£7,700 p.a. Lecturer: £4,700-£6,300 p.a.

Including a supplement, normally tax-free, paid by the British Government under its aid programme. Gratuity of 25 per cent on basic salary payable after each 12 months of children, and subsidised housing. Appointment grant of up to £300 and an interest-free car loan of up to £200 may be payable in certain circumstances.

OVERSEAS DEVELOPMENT KNOW-HOW: vital to developing countries

Adviser-Technical and Vocational Training Malaysia

To advise and assist Director Technical and Vocational Division, Ministry of Education, on technical and vocational education and training (including polytechnic) on guidance, student selection, on the job training, testing placement, vocational curriculum development and staff training.

Appointments Officer, MINISTRY OF OVERSEAS DEVELOPMENT, Room 301, Eland House, Stag Place, London SW1E 5DH. HELPING NATIONS HELP THEMSELVES

OVERSEAS DEVELOPMENT Education Overseas Swaziland

Teacher Training - Lecturer in English

In an English Department responsible for training teachers of English; to participate in planning and running a variety of pre-service and in-service courses; to visit schools to advise teachers; to contribute to the work of Curriculum Development Unit.

Salary in range £2,501 to £3,551 p.a. plus allowance, normally tax free in range £1,454 to £3,458 p.a. (under review).

Education Administration - Senior Inspector of Schools (Mathematics)

To guide, inspect and supervise teaching of mathematics in Secondary Schools; to organise and coordinate teaching of mathematics in Primary and Secondary Schools; to undertake other supervisory duties when required.

Salary in range £4,600 to £5,084 p.a. plus allowance, normally tax free, in range £2,058 to £3,528 p.a. (under review).

Both appointments 27-36 months carry terminal gratuity of 25 per cent p.a. of basic salary. Other benefits include free family passages, children's education allowances and subsidised accommodation.

Appointments Officer, MINISTRY OF OVERSEAS DEVELOPMENT, Room 301, Eland House, Stag Place, London SW1E 5DH. HELPING NATIONS HELP THEMSELVES

OVERSEAS Appointments continued

SPAIN

CONSEJO AUTONOMO DE MADRID... The Ministry of Education... The Ministry of Education... The Ministry of Education...

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South America PERU

An International Consortium of construction companies is seeking from May, 1977, a qualified schoolmaster in the High Andes. The appointment can be delayed until August if the right person is not available until then.

Candidates should have experience in primary education and preferably in secondary as well, have an aptitude for games, and be able to play the piano. An interesting possibility exists for a married man whose wife also teaches since she might be able to provide on a part-time basis any of the requirements which he may lack.

A contract until July, 1979 is offered with a tax free salary of not less than £5,500 per annum together with passages paid, free accommodation and employer's superannuation contribution.

For further details and an application form please apply to Mrs. M. Pouché, Gabbins-Thring Services Ltd., 6, 7 & 8 Sackville Street, Piccadilly, London W1X 2BR. Tel: 01-734 0161.

BAHRAIN ST. CHRISTOPHER'S SCHOOL (750 pupils, mainly British expatriates, aged 3-11 years)

Principal: Mr. J. M. Wrench. Head Teacher required for September, 1977, for Group 5 Infants' School (287 on roll). Salary in the range of Bahrain Dinars 5,544 to 6,084 (approximately £8,058 to £8,843).

Applications are invited from suitably qualified and experienced teachers. This Infants' school is one of three schools in the St. Christopher's complex. The Head Teacher to be appointed will come under the overall control of the Principal. Free fully furnished, air conditioned accommodation and generous allowances are provided. Two-year contract with free passage and termination gratuity. Employer's contribution paid to U.K. superannuation scheme. No income tax at present.

For further particulars and an application form please write to telephone Mrs. Monica Pouché, Gabbins-Thring Services Ltd., Broughton House, 6, 7 & 8, Sackville Street, Piccadilly, London, W1X 2BR; telephone 01-734 0161.

SIERRA LEONE

Applications are invited for the following Technical Teacher Training posts at the

Milton Margai Teachers College a well established College of Education near Freetown for which new buildings and equipment for technical and commercial subjects are being provided by the International Development Association.

HEAD OF DEPARTMENT (Project Manager) £6,177 to £8,282 (under review)

SENIOR LECTURERS £6,105 to £7,647 (under review) Woodwork, Metalwork and Technical Drawing (2 posts) Business Studies

(Salaries include a supplement, normally tax free, paid by the British Government under its aid programme to citizens of the U.K.) The team will be responsible for establishing a 3-year teacher training programme for technical and commercial secondary teachers and for developing in-service training. Candidates should have experience of teacher education in relevant fields including, for the Head of Department, experience at a senior level and of design and technology.

Appointments are for 3 years beginning in September, 1977. Gratuities, subsidised housing, free passages, UK leave, education allowances and holiday visit passages for children and other fringe benefits.

Further details from Recruitment Unit, TETOC (Technical Education and Training Organisation for Overseas Countries) 35/37 Grosvenor Gardens, London SW1W 0BS. Closing date for applications: 26 April, 1977.

tetoc

Kaduna Polytechnic, Nigeria

This rapidly expanding Polytechnic caters for 4,500 students on over 100 different courses, and needs senior personnel to assist in its expansion programme.

Director

To administer students in all fields of engineering as well as food science and catering studies, education (technical), textile technology, irrigation and agricultural mechanisation, mathematics and related sciences and related studies. The Director will also have overall responsibility for the new Department of Mining Engineering and Applied Geology within the College.

Candidates must be graduates with a professional qualification in a branch of technology. They should preferably have 10 years' post-qualification experience, including a considerable period in industry and in an administrative capacity in technical education.

Starting salary is in a scale equivalent to £9370-£10,780 p.a.

Department of Mining Engineering and Applied Geology

Head of Department Principal and Senior Lecturers

To be responsible for introduction of diploma courses in mining engineering including participation in the equipping and commissioning of the Department. Students will be enrolled in September 1977 for the introductory year and teaching in mining engineering and associated disciplines will commence in September 1978.

Applicants for the post of Head of Department must be members of a recognised Institute of mining engineering and have served for several years in a senior position in the mining industry. Experience of administration and teaching is also required.

Starting salary is in a scale equivalent to £8265-£9100 p.a.

Two positions are available for Principal Lecturers, and candidates must be well qualified in either mining engineering (for one post) or geology, metallurgy/mineral processing, or possibly chemical engineering (for the second post), with extensive industrial experience.

Starting salary is in a scale equivalent to £7240-£8130 p.a.

Three positions for Senior Lecturers are available, and candidates should be well qualified in mining engineering, geology, mineral processing or mine surveying with industrial and/or teaching experience.

Starting salary is in a scale equivalent to £6820-£7225 p.a.

College of Environmental Studies Department of Topographic Science Senior Lecturers and Lecturers

The Department at present has 350 students taking full-time 3-year diploma and 1-year certificate courses in land surveying, photogrammetry and cartography. A 2-year higher diploma course in land surveying has recently been inaugurated. All courses have a strong practical bias.

Applicants for lecturing posts in these subjects must have a relevant degree or professional qualification and seven years' experience.

Starting salary for Senior Lecturers is in a scale equivalent to £6820-£7225 p.a., and for Lecturers up to £6510 p.a.

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Television

Is there anybody listening?

Michael Church reviews the film behind the furor

The Best Days? Panorama, BBC 1 last Monday. "Unbalanced and untruthful", Mr Jarvis? Would that it were so. Just as the GLC made an ass of itself by trying to stifle Yorkshire Television's recent report on London's slum housing, so do they impugn themselves by protesting too loudly about the validity of The Best Days... especially when they protest before they have even seen it. What, in the event, did we see? Memorable sights, but a kind of make any parent's flesh creep, and to turn any teacher's stomach with sympathetic horror. We began with an assembly, in which a master enthusiastically presented some Wagner to an apathetic audience. "If you listen quietly, you might be surprised to find it's quite enjoyable." Some hope. While the Walkyries blared out, the camera passed from the impresario's strained, eager face, to watchful teachers, to restive, nudging, striking children. Followed a "tutorial" period, in which a teacher went coquettishly on bended knee—"Promise... please... for me"—to coax an Asian girl into turning up for lessons. Cut, later, to the girl smoking with a friend in the washroom. Over, then, to the headmaster teaching Jane Austen to a fifth year non-examination class. He is the lovable, showman type, and he gets an eager response to his well-prepared lesson. On, then, to a scene of unmitigated disaster. A kind of "St. George's" Hey now! No common! Now we want no more of that needling and swearing, it's not necessary. Finnish the sweets! Victor sid-down! Victor go and get yourself sorted out! Now quiet! Many classes start like this, but this one consisted of precious little else. The "lesson" was about the unification of Germany, but halfway through we heard him point out, "Prussians, not Persians!" Neither he nor the children seemed to have the slightest interest in the subject; both he and they gave every appearance of taking mindless chaos comfortably for granted. On to a Sikh mathematics teacher with the same group of children (third year, average ability). The proceedings were a little more purposeful but, like the history teacher's pencils, the key to the mathematics teacher's cupboard had been stolen. He seemed resigned. There followed glimpses of the group in two "creative arts" lessons: strict attention in the metalwork class, and a prolonged duel of wills between a harassed sewing teacher and a cussed-looking youth (to whom the camera kept returning). Silence and obedience then, in the physical training lesson. Sergeant shouting into the class as though we have so many rubbish lessons. Next, more disaster. The children's English teacher was a strident American girl who launched herself shouting into the class as though she were an encounter group. "I'm thoroughly annoyed and fed up with you today," she bawled after 20 minutes. One had the feeling, from her unsurprised tone and the master-of-the-fact way in which the children accepted it, that the same would hold for many another day. After a modern dance class in the gymnasium we then heard, as though on a different planet, a Polish girl and an Asian boy discussing their plans to go to university. Then we saw a West Indian mother being told by the deputy head about the inevitable consequences of her daughter's absenteeism. As we saw the head firmly but good humouredly ejecting gun-chewing kids from the corridors during break. Then followed some poignant interviews. A housemaster, with compelling reasonableness, first upbraid the puzzled looking parent ("you've been talking to a woman of mature years"), then encouraged a serious would-be examinee, and finally listened to a pathetically sophisticated girl giving a litany of sins in a baby-doll voice. "Bunked off, being late, being rude to the teachers..." Then came a few minutes in the "sanctuary" (for children with problems in normal classes) where teachers tried to coax their pupils to talk constructively about their work, their interests—anything. Next, in a fifth year biology class taken by a bright, thoughtful, and a truculent girl kept protesting the uselessness of biology—less, I felt, because she believed this than because she had somehow convinced herself that defiance was her painful duty. Next, gently paternal coercion in a traditional French lesson with the fifth year examination class: the kids enjoyed being stretched. Then came a career lesson, in which the careers officer explained—to a group of girls who had all made secretarial work their first choice—the difference between secretary and typist. This was an unexpectedly significant moment in the film, in complete contrast to all the other adults we had seen, the woman's voice and manner bore the equable, impersonal mark of the untroubled outsider. Institutionalization has physical symptoms, too. Mr Dimbleby, who introduced the film, described the school as an "ordinary" outer London comprehensive and suggested that the Panorama account showed what school could now be like for millions of children and their teachers. There is, of course, no such thing as a typical school: there are country schools where teachers get upset if they have a handful of "difficult" children, and there are inner city schools whose teachers feel positively grateful if they find a handful of children who are not "difficult". This school was neither (but by no means at) the latter end of the spectrum, and if "millions" was an exaggeration, "hundreds of thousands" would probably not be inaccurate. Mr Dimbleby might indeed have fended off more questions by a fuller statement of his guiding principles (and it was certainly a mistake not to explain that two of the teachers were probationers), but in the last analysis every film has to be the view either of one person, or at most, of a group. As audience, one is forced to come to one's own conclusions about the teachers' intellectual and moral integrity. Despite the chorus of protest this week, two important facts could suggest that Miss Pope should be given the benefit of the doubt. The first is that both the head and the local chief education officer initially gave the film their blessing. The second concerns the things which it did not show: no violence between children, or between teachers and children, no children running amok in the class-

room, no teachers in an hysterical rage. If Miss Pope had wanted to sensationalize, or make a polemic film, she could easily have done so. It has already been observed that The Best Days? poses important questions about authority. While it suggests that children like and respect teachers who are indulgent, plian, it does also indicate, I think, a deeper crisis. The balance of opinion in the teaching profession has recently shifted so strongly towards the view that discipline should develop within children, rather than be imposed from without, that in many schools a vast, now exists where the common, suprema used to be. The film will inevitably present ammunition for a host of pressure groups (and the teachers who are implicated in its making may therefore be bitterly regretting their decision). Those who argue that the gap between the respective attitudes of home and school is the result of less interest in the teenage world by the older generation, advocates of chalk and talk. Opponents of comprehensiveization will have a field day. The relevance of The Best Days? to the Great Debate is more problematic. There is no denying the significance for schools of the Paradox of deliberation and the financial crisis or curricular reform: these things can directly ameliorate or exacerbate the situation. But the film is, at its most fundamental level, about attitudes, and these change slowly with age, experience and sometimes suffering. Nothing in The Best Days? should have surprised teachers, or even students. But the portrait of an "ordinary" school, where a large proportion of the children and even a minority of the teachers are in a state of mindless routine, and where physical activities are, broadly speaking, taken more seriously than intellectual ones—that may give the great British public pause for thought.

Theatre and education

Festival fever

National Student Drama Festival. The twenty-second festival (sponsored by The Sunday Times and the Scottish Tourist Board) will be held at St. George's, Edinburgh, 1 and 2 April. Top student productions of new and well-known plays will be augmented by speakers, guest performances, practical workshops, discussions and play readings. Nottingham Festival Fringe. A programme of fringe events will complement the main festival in June. They will include professional and student productions, dance and movement groups. The Royal Court Observer Young Writers' Festival is well under way. More news of this next week. Young Vic Coventry. The Tom Stoppard double bill, If You're Glad I'll Be Frank and The Real Inspector Hound will be performed at the Belgrade between March 28 and April 2. Young Vic London. Saturday mornings for children, admission 50p. Two special programmes, each beginning at 11.30 am, will be presented tomorrow and next weekend. Pop Song involves the audience in writing and recording a song and there will be a demonstration showing how a pop song is written, recorded and publicized. On April 2 The King's New Clothes, by 15 year old Steven Davies, will be acted by the Young Vic Company. Coventry. Special school rates are available for performances of London Assurance and Julie Caesar at the Belgrade Theatre in April and May. The Dullard of Solomon Poney, first performed by the boys of Belmont School, Mill Hill, will be revived at the Young Vic between April 12 and 16. Chester. The run of Paddington

Art

In a new light

Michael Clarke

Light Fantastic: Holography/Inser beams. Royal Academy of Arts. What would Sir Joshua have made of it? In the courtyard of the Royal Academy the first president's palette reflects the narrowest beam of light up on to the night sky to draw the stars into a constellation. Inside, beads of glistening light ripple across the stuccoed ceiling, stiffen up and descend, a luminous platform, on to the visitors' heads below—heads already stunned by what they see before them. Although holography was conceived by Dennis Gabor in 1947 it was not until the invention of the laser in 1960 that really accurate results were made possible. While in one plane only, the holograph behaves like a real scene, revealing different aspects of the object as the viewer's position changes. The constant temptation is to reach out to grasp the object, turn on the tap, pick up the telephone. Because several images can be stored on the same hologram plate, the plate can be rotated, one image dissolving to reveal another. It seems like sorcery. Already used in surgery, space research and rock concert light shows, the laser beam and holograph's potential is excitingly diverse. But whatever benefits we might receive as a result of its use in medicine, the industry it is undoubtedly their employer it is the theatre that will create the most sensational effect. Brunnhilde can at last, and convincingly, be sent flaming and burning into the flames and the Berlin's Dramaturgische Ensemble can take its place at a long runner of The Who and other rock band spectacles. Heather Nell

On the home front

Continued from p.20 publishers to choose the sellers. The purpose was to get some "new thinking" and in further pursuit of new thought the working party ostentatiously removed from the discussions the officers of the two trade associations who might have been too earthbound. Also, this pantomimic prelude and two years of deliberations produced only the stark recommendation that discounts should be up to 45 per cent. A 35 per cent was deemed necessary for all books with such additional discounts as publishers would offer or retailers could extract. In fact, for general books 35 per cent has long been passed and discounts of 40 per cent or over 45 per cent can be had. Consider the consequences. Book prices have risen as a direct result of higher discounts. Secondly, bookshops have been put at risk. It was the supreme fatuity of the working party's report that it pledged its loyalty to the NBA while recommending actions that would curtail its purpose. For the NBA is an agreement between publishers which binds the pricing behaviour of the booksellers, so that the bookshops will thrive because the publishers need them to thrive. But at the levels to which discounts have risen, alternative ways of selling, for instance, relatively more attractive. Even bookshops can price themselves out of trading. Yet if the higher discounts have weakened the dependence of the publisher on the bookseller, they have heightened the bookseller's dependence on the publisher. The bookseller might have taken place in the wake of an unfavourable judgment in 1982 when discounts can from 16 per cent to 33 per cent it would have been nothing to what will be possible if the agreement is wound up. Thirdly, if the publisher needs to recoup from a backlist book at extra 50p for each copy sold he may be forced to add £1 to the retail price to achieve it. That is an unacceptably inflationary level of recouping. Justifiable increases in the price of books are the price of cost-bearing in the print media. Whereas the publishers and retailers should not count their heads by using discounts, sharing a balance at a high level. What now? It is useless to say there should be increases of discounts whatever because there are very numerous permutations of discounts. But undoubtedly, the maintenance of discount policy should be in the direction of reducing it in the short run and increasing it in the longer. Simultaneously, which the NBA assumes and creates, there must be a joint, determined, indeed successful, attack on distribution in which new systems of bookshops and delivery and retailing, television and direct mail research will all play a part. Noel Hugh

In April

The Landini Consort, the Early Music Group of York, the Taverner Consort and the Consort of Musicke are just some of the participants in the York Early Music Week, sponsored by Percip and taking place between April 16 and 24.

Home from home

Cherida Mares on a social studies series for teenagers

Scene (BBC Thursday 11.00-11.20, Fridays 2.02-2.22) Scene is for teenagers of average and below average ability, which is intended to act as a starting point for discussion and follow up work in humanities and social sciences. It runs in a two-year cycle, so no programme is repeated in the year after its first transmission, thus allowing the series to be viewed by pupils in both fourth and fifth years. A study book is available (price £8.30) which provides material for a class of up to 30 pupils. Unfortunately this summer is the last time the study book is being produced, as production costs are making it impossible to keep the price within the reach of most schools. The programmes this term have covered a wide spectrum of interests, from combat sports to teenage magazines, from emotional problems to social issues. Some of the topics might at first seem to appeal predominantly to either boys or to girls, but in fact teachers using the series have found that both sexes have enjoyed most programmes, and although boys tended to be less interested in the teenage magazine, both boys and girls found mountain climbing the least interesting of the topics. As was to be expected, there were various reasons for these preferences. Many pupils commented that they had already seen enough of the television coverage of the rock and snow slopes, and perhaps another reason for finding this topic uninteresting in comparison with others covered this term, is connected with the phrase "relevant experience" in the teacher's notes. One of the reasons for Scene's popularity is that pupils expect to be able to identify and to discuss events directly related to their own lives. The play "Mum, where are you?" by Eric Pace, intended to help children understand that parents have lives and problems of their own, gave just this opportunity for pupils to identify with the characters, to discuss topics such as interdependence, resentment and insecurity within the family, and to realize that many of their own feelings are mirrored in the lives of their classmates. The documentary programmes this term have been equally successful, particularly "They all lived happily ever after", which used case histories to illustrate the issues involved in adoption. In many classrooms the programme acted as a catalyst for a discussion on complex feelings about family relationships and for the exploration of topics such as abortion, illegitimacy and fostering. Next term's programmes promise to be equally interesting and include another play by Eric Pace about the isolation of young families in high-rise flats, a programme on the Morecambe and Wise show and six documentaries. The documentaries involve pupils to talk about subjects such as the environment, running away from home, social workers and teenage gangs. The BBC shows its appreciation of this series by allowing it to be one of the pure schools' programmes in which the length of transmission varies from week to week, sometimes lasting 30 minutes instead of the statutory 20 minutes of most schools' programmes.

Radio

Carrots for donkeys and cabbages for crocodiles

Roy Blatchford on adaptations of adventure stories and a creative writing series

Adventure. Fridays 2.40-3.00 pm. Radio Four. Publishers have recently begun homing in on the 13 to 16-year-olds who dislike reading. The "Adventure" series has been pursuing them since first went out in September 1973. Editor Peter Fozzard's long-standing aims have been to encourage the enjoyment and reading of fiction and non-fiction through radio dramatizations. Adaptations of extracts from Ian Nal's A London Boyhood, Margaret Greaves's Curfew and Keith Waterhouse's Billy Liar supplied excellent listening in the autumn. The first of this term was an abridged version of Robert Louis Stevenson's The Bodysnatcher, a macabre ghost story presented in broad Scots dialect with splendid gusto. As a 20-minute play for radio, it answered critics of schools broadcasts who complain that they are increasingly less interesting in casual, eavesdropping listener. It was more than a match for Radio Four's Stormtime adaptation of Doctor Jekyll and Mr Hyde, also on the air earlier this year. Grinny by Nicholas Fisk is an intriguing piece of science fiction told in the form of a diary kept by a boy who is the central character and narrator. In the third programme of the term we were introduced to a compelling and animated production that succeeded in motivating adolescent readers beyond the crucial point in the tale which the programme ended. Planning and Writing. Radio 4, Fridays 11.20-11.40. Age 11-14. BBC Radio for Schools may long have ceased to be as vital as it was at the end of the 1960s. Teachers who were at school in the early 1960s will remember Listening and Writing as a regular maladjust. Up and down the country today the series provides a tenuous but jealously guarded balance between parochialism and centralized broadcasting. Last term's output included Kipling's Barrack-Room Ballads, Benny Carter's look at the popular music he has enjoyed and Country Boy (adapted in two parts) the story of a young boy who attempts to escape the drudgery of working on a farm in the pre-Great War period. How teachers respond and use the programmes depends of course on their audience and aims. Often, a very moving or exciting piece of radio drama is best left to speak for itself, with follow up delayed to a later date and a related topic. Alternatively a set of poems, looked at before the broadcast, will suddenly come to life on the air and act as a starting point for pupils' endeavours. This term two different plays encourage equally different responses. Goldilocks and the Crocodile poses a zany problem: what could do when a crocodile starts eating your cabbages? Follow-up work might have included acting out the play or constructing a similar drama. I read the news today, by Willy Russell, is a disturbing and wryly amusing piece, and was superbly handled by the lively DJ character and local Lancashire lad. A teenager, sickened by the muzak and advertising pulp that dominates the media, breaks into a radio station and broadcasts "live" against the authorities who frustrate his generation. Discussion points flow naturally from the play, possibly with pupils taping their own pieces and experimenting with broadcasting. To stimulate creative writing series editor David Kerrison asked poet John Mole to assemble a sounds collage to reflect his travels in the United States. In the first of two programmes, the stereotypical picture of the country—Jack Kerouac's sawdust saloons and

95 Broadcasting/Briefings

Short and sharp

Brian Hill on the BBC's intensive language courses

Intensive language teaching is attracting increasing attention, and this spring the BBC is offering some short intensive courses in various packages, ranging from once a day for five days to once a week for five weeks. The series title is "Get by in..." and Spanish and German are the first two languages to be tried out. By the end of programme one, learners should be able to greet somebody cheerfully and politely, order coffee, tea and fruit cake, buy cigarettes, wine and beer, demand menus and pay anything up to 36 marks 40 pfennigs. By programme five they should have enough ammunition to move around the hotels, restaurants, shopping centres and garages of Spain and Germany without being tricked. It is notoriously difficult to define the word "basic", but the intention of these new series is to give the learner words, not structures, and to enable him to understand at least whether someone is offering body powder or English newspapers. Given a few words and an inventive mind, surprisingly varied themes can be tackled. There are clearly certain strengths in these programmes. They meet a defined need for courses which do not demand a long-term commitment. They are short, sharp and to the point. Some words selected for emphasis (e.g. Bienisch or Pfennig) but, in general, the vocabulary is amount of variety in the presentation and the learner is constantly involved, either in listening exercises or in uttering some basic request. A weakness might be that, in order to be used for intensive learning has to include a lot of repetition, in lessons and as revision of known material. In broadcast terms a shiny record probably have meant trying to construct something along the lines of a radio Sesame Street, with the same points hammered home by a variety of striking devices. In the event, we are given a mixture of studio presentation and short recordings taken on location, the same formula as for longer courses. There is some clear repetition, as in numbers, but overall there may not be enough, and the learning load may prove too much for home learners, the series could be useful in schools and colleges. It would be a lively introduction to a deeper, more structured course; it is ideal for school parties preparing for skiing or sunbathing holidays; it could be used as a diagnostic test on the appropriateness of an audio-lingual approach for a particular class/group; it could be brought into other courses to reinforce certain points. Pupils' rates (price 50p plus a large stamp ed addressed envelope) help to give the series some substance. The emphasis on self-correction, little work tasks and don't bring home provides context to academic theory. Other People's Children (Sunday 13.25, Thursday 10.45 BBC 1, Tuesday 14.15 BBC 2) Child minders and health visitors reflect on emergencies and offer advice on first aid. How do you distinguish a bump from a fracture? Voci dall'Italia (Sunday 14.30 VIII 4) A programme for cognoscenti with high-powered interviews in Italian. This week Fiorenza Covatta reveals what makes him sing. Alternatives (Sunday 15.30 VIII 4) An impartial investigation of how new life-styles work in practice. Old Ball, a commune in Suffolk, is the first of three programmes on alternative social structures. The Golden Age of Spain (Sunday 16.30 Radio 3) A personal view from Professor Glendinning of the historical, social and economic background against which literature, painting and music developed. News Now (Sunday 17.50 Radio 2) Some common Everythings in commercial communication. Alfred Marks officiates in this course for adults who were illiterate before "On the Move". Get by in Spanish/German (18.30 and 19.00 Radio 4) A new intensive approach to language learning with programmes in Spanish and German each night of the week. Both start in the restaurant and give basic vocabulary for calling the waiter, ordering meals and paying the bill. Shopping, travelling, asking questions and getting the time are some of the subsequent themes featured. Parents and Children (Thursday 19.05 BBC 2) "Having a Baby" examines the importance of keeping accurate medical records. The reasons behind questions doctors ask are explained and the term "at risk" is carefully defined.

Briefings

Radio and tv

Mass Communication and Society (Sunday 11.00 BBC2, Thursday 07.05 BBC1) Fly on the wall technique with Open University television producers covering the Republic Convention. Asks how aware of the real world individuals in charge of the media are allowed to be. Catch Your Muttant (Monday 17.45, Wednesday 06.40 BBC2) Examines the genetic basis of organisms to improve crop quality and quantity. Energy (Wednesday 07.05 BBC 1) In the course "Technology for Teachers" a teacher from Lewes shows how he approached the problem of teaching year lower ability pupils. Demonstrates ways of using "freely" available sources of energy like sun and wind. Decision Making in Britain (Thursday 16.55 BBC 2) Focuses on vandalism and discusses how far public institutions are equipped to understand the problem and deal with it. A North London housing estate provides context to academic theory. Other People's Children (Sunday 13.25, Thursday 10.45 BBC 1, Tuesday 14.15 BBC 2) Child minders and health visitors reflect on emergencies and offer advice on first aid. How do you distinguish a bump from a fracture? Voci dall'Italia (Sunday 14.30 VIII 4) A programme for cognoscenti with high-powered interviews in Italian. This week Fiorenza Covatta reveals what makes him sing. Alternatives (Sunday 15.30 VIII 4) An impartial investigation of how new life-styles work in practice. Old Ball, a commune in Suffolk, is the first of three programmes on alternative social structures. The Golden Age of Spain (Sunday 16.30 Radio 3) A personal view from Professor Glendinning of the historical, social and economic background against which literature, painting and music developed. News Now (Sunday 17.50 Radio 2) Some common Everythings in commercial communication. Alfred Marks officiates in this course for adults who were illiterate before "On the Move". Get by in Spanish/German (18.30 and 19.00 Radio 4) A new intensive approach to language learning with programmes in Spanish and German each night of the week. Both start in the restaurant and give basic vocabulary for calling the waiter, ordering meals and paying the bill. Shopping, travelling, asking questions and getting the time are some of the subsequent themes featured. Parents and Children (Thursday 19.05 BBC 2) "Having a Baby" examines the importance of keeping accurate medical records. The reasons behind questions doctors ask are explained and the term "at risk" is carefully defined. Film library's 50 years The Central Film Library is celebrating its jubilee year. Established in 1927, it has a wide range of films for non-theatrical use. One or two new titles are added each week to keep the collection up to date. About 800 films are on specifically industrial topics and the others are on educational and general interest subjects. Many of the titles are loaned free. Charges for the others are £2 a week, half price for schools. Two catalogues are available: Films for Industry (50p, including postage) and General Interest and Educational Films (60p plus postage). Len Dawes, Central Film Library, Government Buildings, Bromsgrove Avenue, Acton, London WA 5JB.